

STEREO CASSETTE RECEIVER

# KRC-653D/L

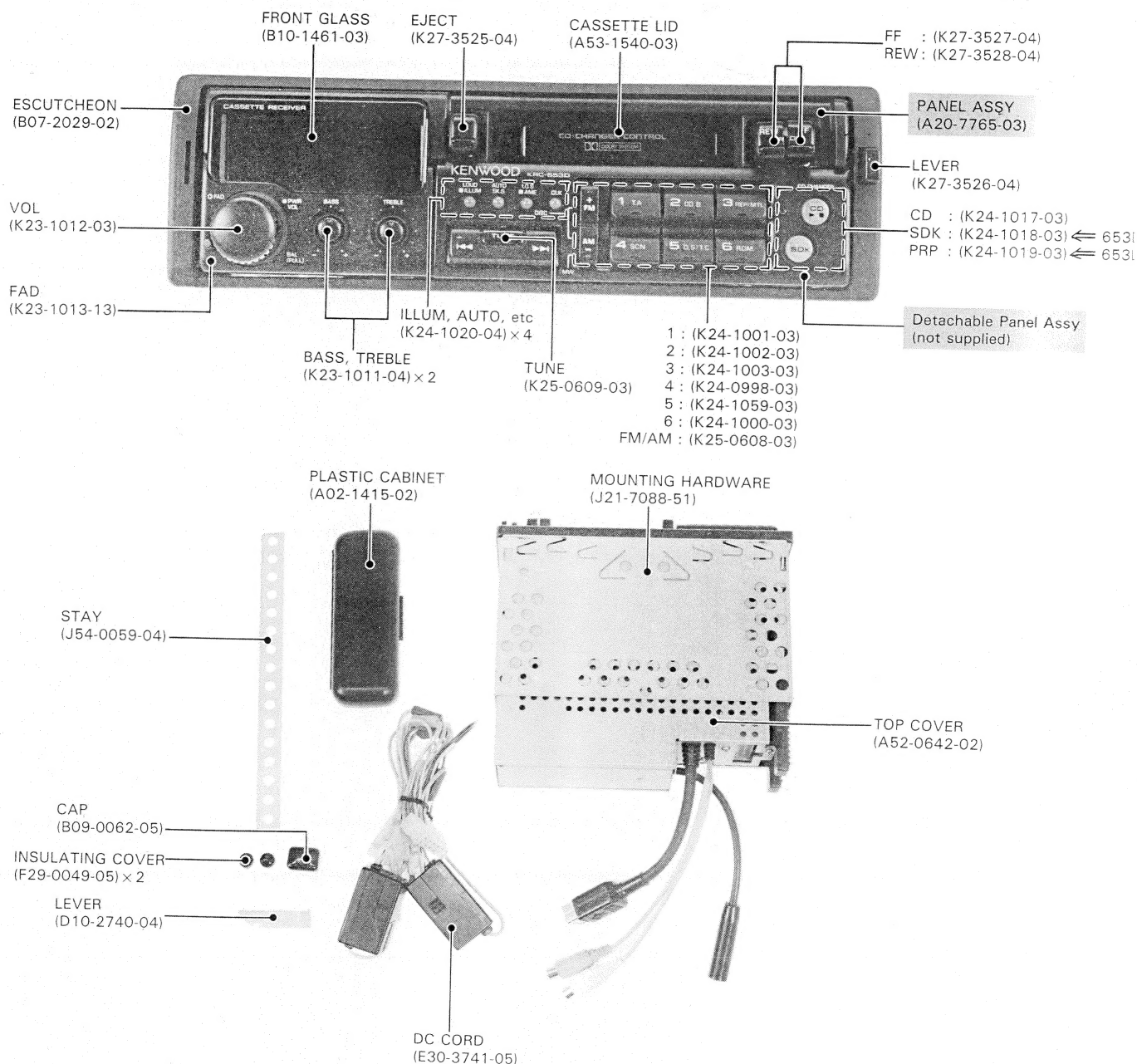
## SERVICE MANUAL

# KENWOOD

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### Attention for parts order

- ① PANEL ASSY (A20-7765-03) does not include Detachable Panel.
- ② Detachable Panel Assy is not supplied by "ASSY" as service parts.
- ③ The detail is shown on the Exploded view for unit P42 and parts list P43 ~ P55.



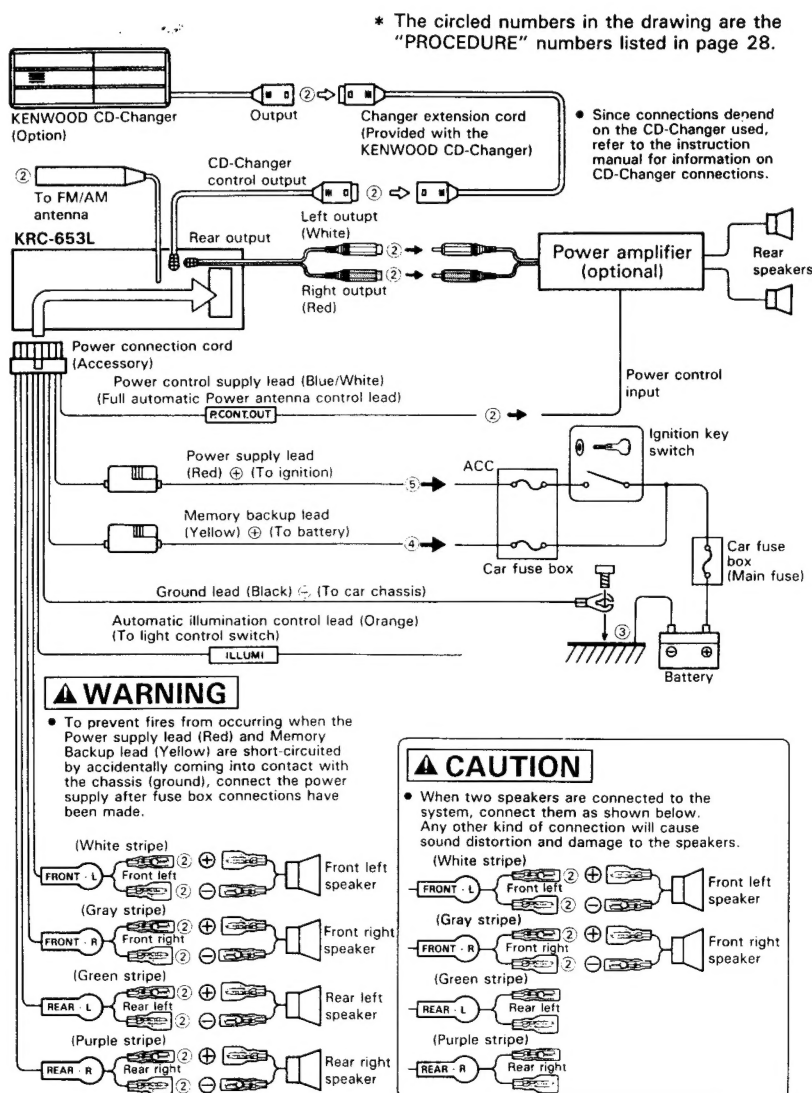
\* Refer to Parts List on page 43.

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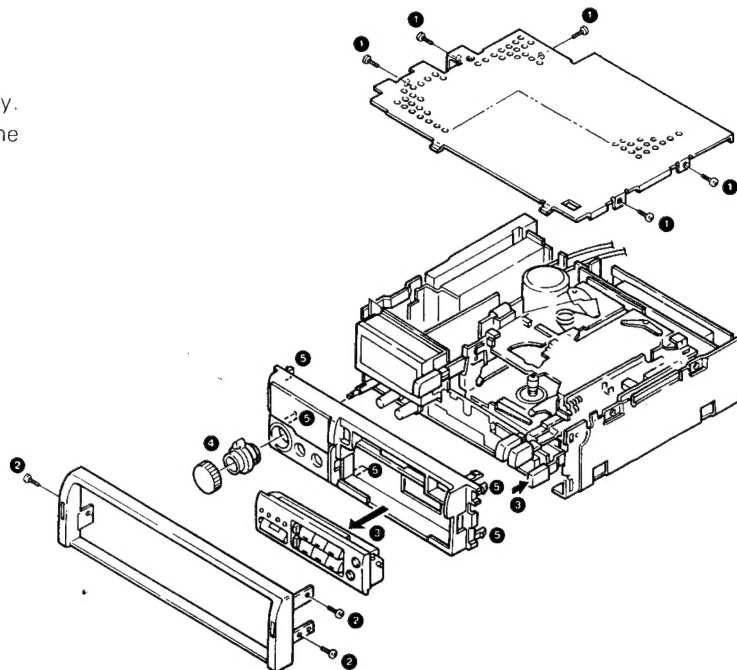
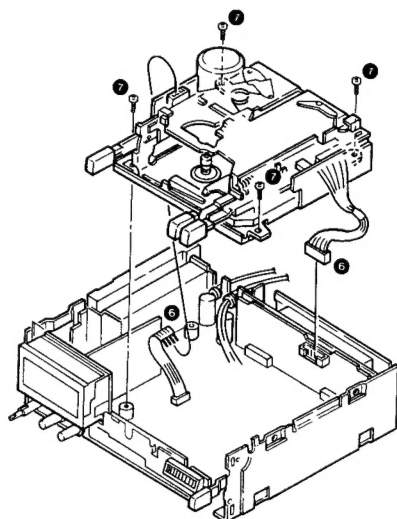
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## CONNECTION



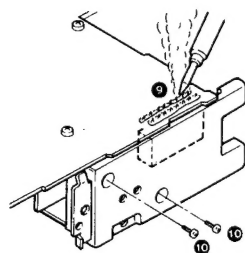
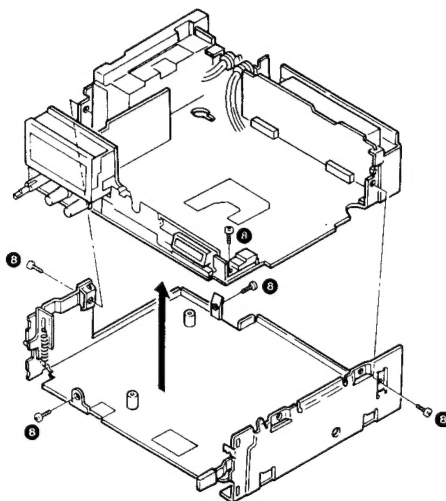
## DISASSEMBLY FOR REPAIR

1. Remove the 5 screws (1) and remove the top cover.
2. Remove the 3 screws (2) and remove the top panel.
3. Press the lock button (3) and remove the switch assembly.
4. Remove the volume control knob (4) and press in on the 5 tabs (5) to remove the panel assembly.



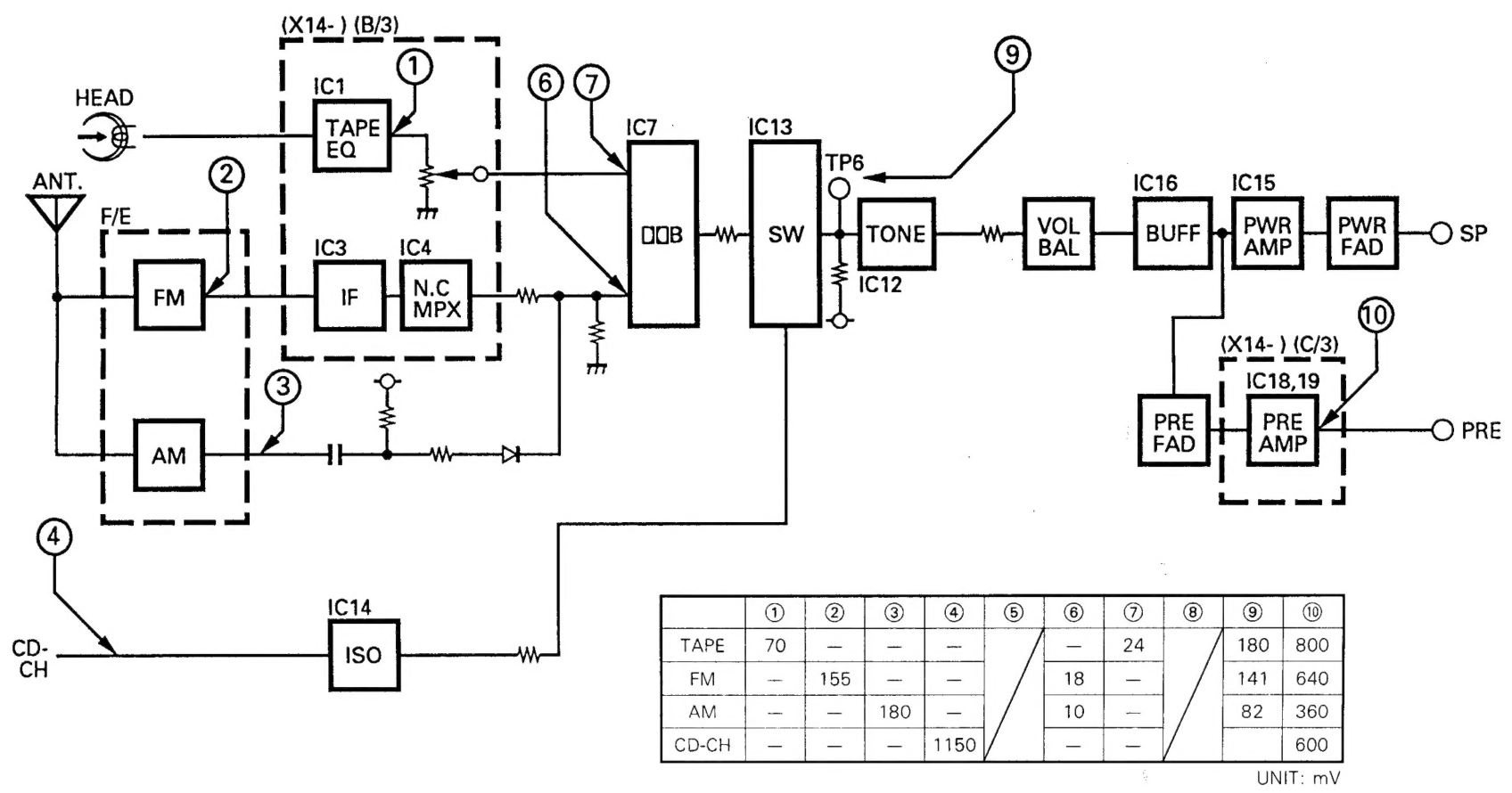
5. Remove the 2 connectors (6).
6. Remove the 4 screws (7) and remove the cassette mechanism.

7. Remove the 5 screws (8) and remove the entire circuit board.



8. Use a soldering iron to remove the solder from the pins of IC15 (9).
9. Remove the 2 screws (10) and remove the heat sink.

## BLOCK & LEVEL DIAGRAM





## CIRCUIT DESCRIPTION

## TERMINAL DESCRIPTIONS

## SYNTHESIZER UNIT (X14-344X-XX)

Ref. No.	Components	Use/Function	Operation/Condition/Compatibility
IC1	BA3424S	TAPE EQ AMP	
IC2	AN6262N	TAPE ADV	Detection of spaces between tunes on tape, and plunger cout.
IC3	LA1140-K	FM IF AMP	FM IF signal amp.
IC4	AN7465K	FM MPX N.C.	Demodulator, noise canceller.
IC5	TDA1579	SDK IC	BK/DK signal demodulation and detection. D only
IC6	NJM 4565M	SDK IC INPUT BUFF, BKBPF	D only
IC7	HA12134AFP	Dolby B type	Signal switching between Tape and Tuner, signal amplification, and Dolby B encoding.
IC8	TC74HC04AF	CD-CH I/O	Buffer for data, communications with I/O box in CD-CH mode.
IC9	1723GF-605-3BE 1723GF-606-3BE	$\mu$ -COM	Key control, other controls, PLL, LCD drive (605 D type 606 L, K type)
IC10	BA3906-VI	AVR	Supplies of $V_{DD}$ , CE, COM 8 V, FM 8 and AM 8 V. MUTE output.
IC11	TC4081BF	AND Gate	For use with $\mu$ -COM key matrix (alternate SW).
IC12	NJM4565MD	TONE CONT AMP	
IC13	TC4066BF	ANALOG SW	Signal switching between Dolby out and CD-CH.
IC14	BA3121F	ISOLATION AMP	CD-CH isolation amp.
IC15	TA8215H	PWR AMP	
IC16	NJM4565MD	Buff AMP	Buff for PWR AMP and PREAMP.
IC17	NJM4565MD	1/2 $V_{CC}$ Buff	Buffers the voltage generated by Zender D and resistance division and supplies voltage as 1/2 $V_{CC}$ for (the Dolby IC, ISO AMP, TONE AMP) and (Buff AMP, PREAMP)
IC18	NJM4565MD	REAR PREAMP	
Q1	2SB1428	Plunger Driver	Drives the plunger based on the spaces between tunes detected by IC2.
Q2	2SC2413K	FM IF AMP	Amplifies IF signal from F/E.
Q3	DTC144EK	AFC SW	OFF during seek, ON during receive.
Q4	2SC2412K	SD Buff	
Q5	2SC2412K	CRSC Driver	
Q6	2SC2412K	ANRC Buff	
Q7	DTC144EK	SK LAMP ERRONEDUS LIGHTING PREVENTION SW	D only
Q15	DTC144EK	T-ADV SW	OFF during FF while T-ADV is ON.
Q16	2SC2412K	MECHANISM MUTE SW	MUTE in FF, REW and PROG modes.
Q17	DTA144EK	MECHANISM MUTE SW	MUTE in FF, REW and PROG modes.
Q18	DTA 144EK	AM AGC CUT SW	
Q19	DTA 144EK	AM BS SW	Q20 control L type only
Q20	DTC144EK	AM BS DRIVER	L type only
Q21	2SC2412K	SD INV.	
Q22	2SC2412K	AM SD SW	
Q23	2SC2412K	FM SD SW	
Q24	DTC144EK	SD INV.	
Q25	DTC144EK	FM LO/DX SW	
Q26	DTA114EK	PWR ON 5 V SW	
Q27	DTC114EK	PWR ON 5 V SW	
Q28	DTC124EK	PWR ON 5 V INH SW	

# RC-653D/L

## CIRCUIT DESCRIPTION

Ref. No.	Components	Use/Function	Operation/Condition/Compatibility
Q29	DTC144EK	LED + B DRIVER SW	
Q30	DTA144EK	LED + B SW	
Q31	2SC2412K	PWR ON 5 V INH SW	
Q32	2SC2412K	ACC and TPC DET SW	
Q33	DTA144EK	AVR STBY CONTROL	
Q34 ~ 36	2SC2412K	PLL LPF	FM/AM Vt LPF
Q37	2SA1037K	CD-CH REQ IN CONTROL	When ACC is ON, recognizes whether CD-CH is connected or not, and outputs signal to $\mu$ -COM.
Q38	2SC2412K	CD-CH CD CON BUFF	
Q39	DTC144EK	CD-CH REQ IN BUFF	
Q40	DTC144EK	CD-CH REQ IN BUFF	
Q41	2SB1370F8	ILLUMINATION AVR	10.4 V Darlington
Q42	2SC2412K	ILLUMINATION AVR	10.4 V Darlington
Q43	2SA1037K	VOL BOOST SW Driver	D only
Q44	2SA1037K	LOUD SW Driver	ON in LOUD mode to drive Q68, Q69.
Q45, 46	2SB1277	ILLUMINATION SW driver	
Q47 ~ 49	DTC144EK	ILLUMINATION SW driver SW	
Q50	DTA144EK	MANUAL RST	CD-CH RST.
Q51	2SC2412K	Alternate key SW	DK SW D only
Q52	2SC2412K	Alternate key SW	SK SW D only
Q53	DTC144EK	LOCAL INH.	
Q54	2SA1428	MOTOR DRIVER	
Q55	DTC144EK	MOTOR DRIVER SW	
Q58	DTC144EK	PWR AMP STBY SW	
Q59	DTC144EK	P.CONT OUT SW	
Q60	DTA144EK	ILLUMINATION SW	
Q65	2SA1037K	Audio Mute Driver	ON in Mute mode to drive Q66, Q67.
Q66, 67	2SD1757K	Audio Mute	
Q68, 69	2SC2412K	LOUD CON SW	
Q70, 71	2SD1757K	VOL BOOST SW	
Q72	DTC144EK	SIG SW	ON in CD-CH.
Q73	DTC144EK	SIG SW	OFF in CD-CH.

## CIRCUIT DESCRIPTION

## DAUGHTER UNIT (X89-144X-XX)

Ref. No.	Components	Use/Function	Operation/Condition/Compatibility
Q1	2SB822F	P.CONT OUT driver	Drives P-CONT output, protects its current.
Q2	2SA1037K	Protect Q1 Tr	
Q3	2SA1037K		
Q4	DTC114EK	P.CONT OUT driver SW	OFF during MUTE OUT.

## DAUGHTER UNIT (X89-143X-XX)

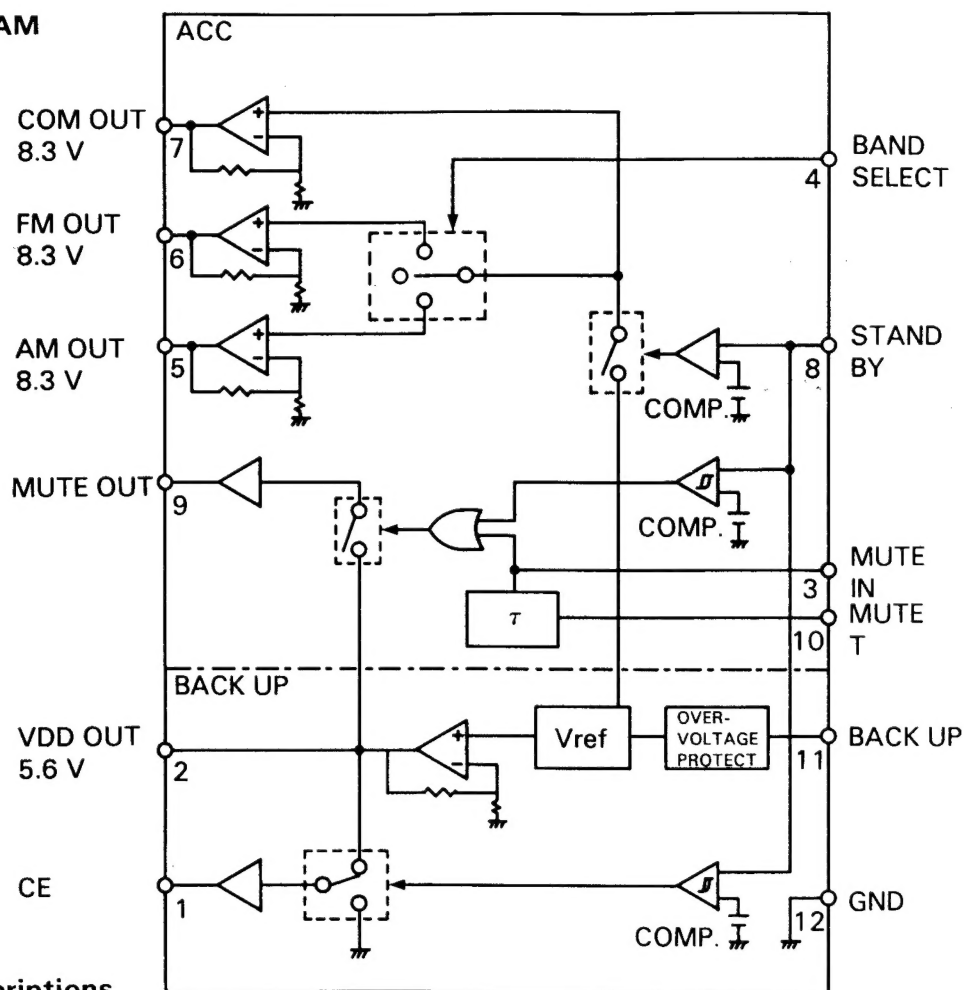
Ref. No.	Components	Use/Function	Operation/Condition/Compatibility
Q1, 2	DTC124EK	ILLUMINATION SW	
Q3, 4	DTB143EK	ILLUMINATION SW	
Q5	DTC144EK	PACK IN DET	
Q6, 7	DTC144EK	MUTE DRIVER SW	
Q8, 9	2SC2412K	ACC DETECT	Outputs early MUTE when ACC is lowered or during manual reset. Performs early grounding of $\mu$ -COM CE pin when ACC is switched OFF.
Q10	2SC2412K	ACC DETECT	
Q11	DTC144EK	ACC DETECT	
Q12	DTC144EK	TAPE MUTE INH	

## CIRCUIT DESCRIPTION

BA3906-V1 (IC11: X14-3470-11)

Power Supply IC

## BLOCK DIAGRAM

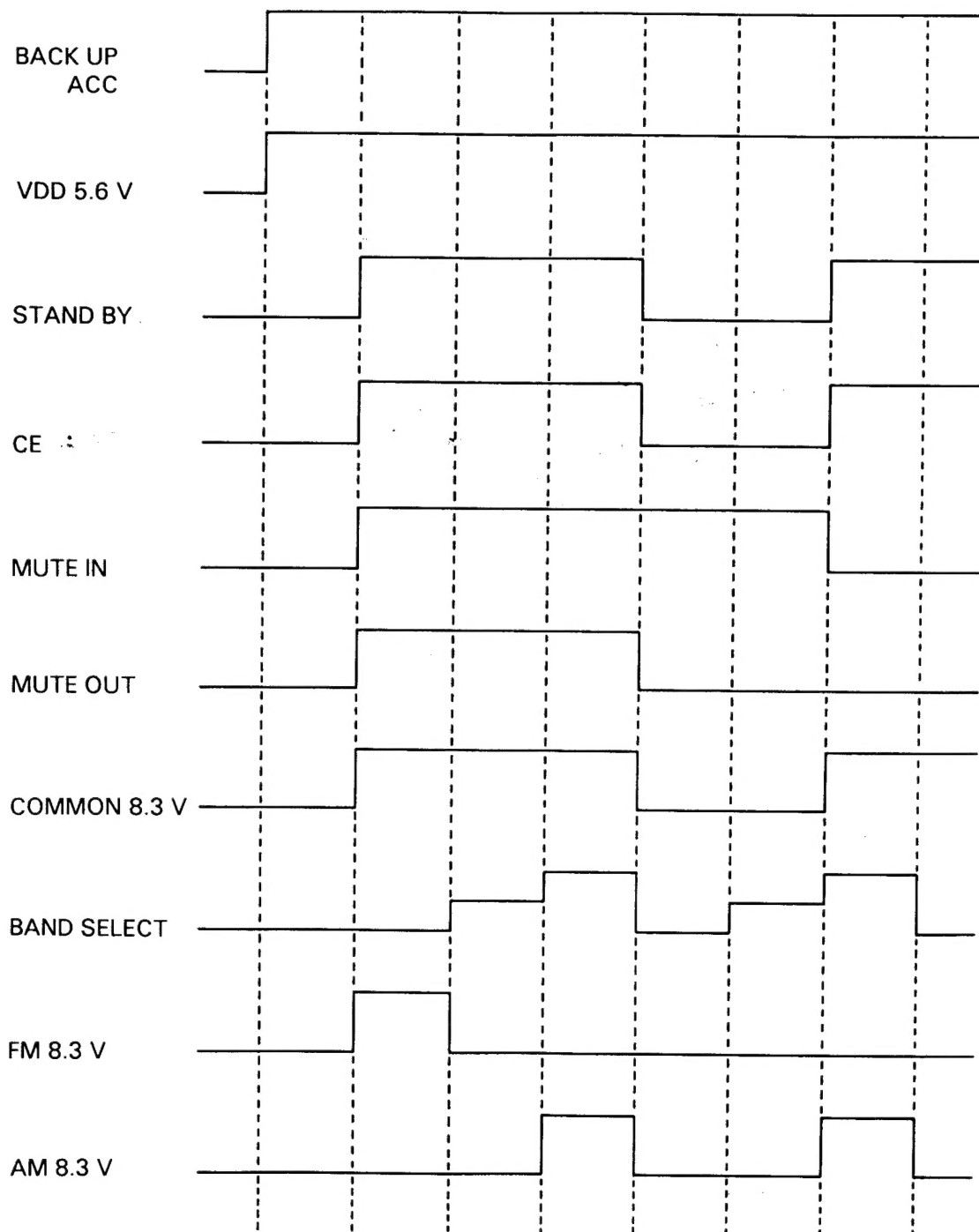


## Terminal descriptions

1	CE	Outputs $0.82 \times V_{pp}$ or more when the $\mu$ -COM is to be operated normally, and outputs 0 V when it is not used. Holds 0 V even during stand-by.
2	$V_{DD}$	5.6 V power supply with 60 mA max. output current. For use with $\mu$ -COM. Permanently outputs voltage provided that the backup power is connected.
3	MUTE IN	Input terminal for MUTE from $\mu$ -COM or other external sources.
4	BAND SELECT	AM/FM output selection input with 3-state input. 8.3 V power supply with 145 mA max. output current. For use in AM reception.
5	AM OUT	Outputs power when "H" is input to BAND SELECT terminal.
6	FM OUT	8.3 V power supply with 250 mA max. output current. For use in FM reception. Outputs power when "L" is input to BAND SELECT terminals.
7	COM OUT	8.3 V power supply with 125 mA max. output current. For use in tone control. The power can be used as the system common power for the volume/balance control, for the equalizer, in the cassette tape deck, and for the varicap in the electronic tuner. Power is output when STANDBY terminal is 6.5 V or more, regardless of the BAND SELECT terminal position.
8	STAND BY	0 V for stand-by mode, in which signal is output only from $V_{DD}$ terminal. The voltage at this terminal determines CE output and MUTE OUT output as well as AM OUT, FM OUT and COM OUT outputs.
9	MUTE OUT	MUTE transistor driver.
10	MUTE	Time constant terminal for MUTE IN.
11	BACK UP	Connected to backup power and ACC power of the vehicle.
12	GND	Input/output timing chart Ground.

## CIRCUIT DESCRIPTION

Input/Output timing chart 102



# <RC-653D/L

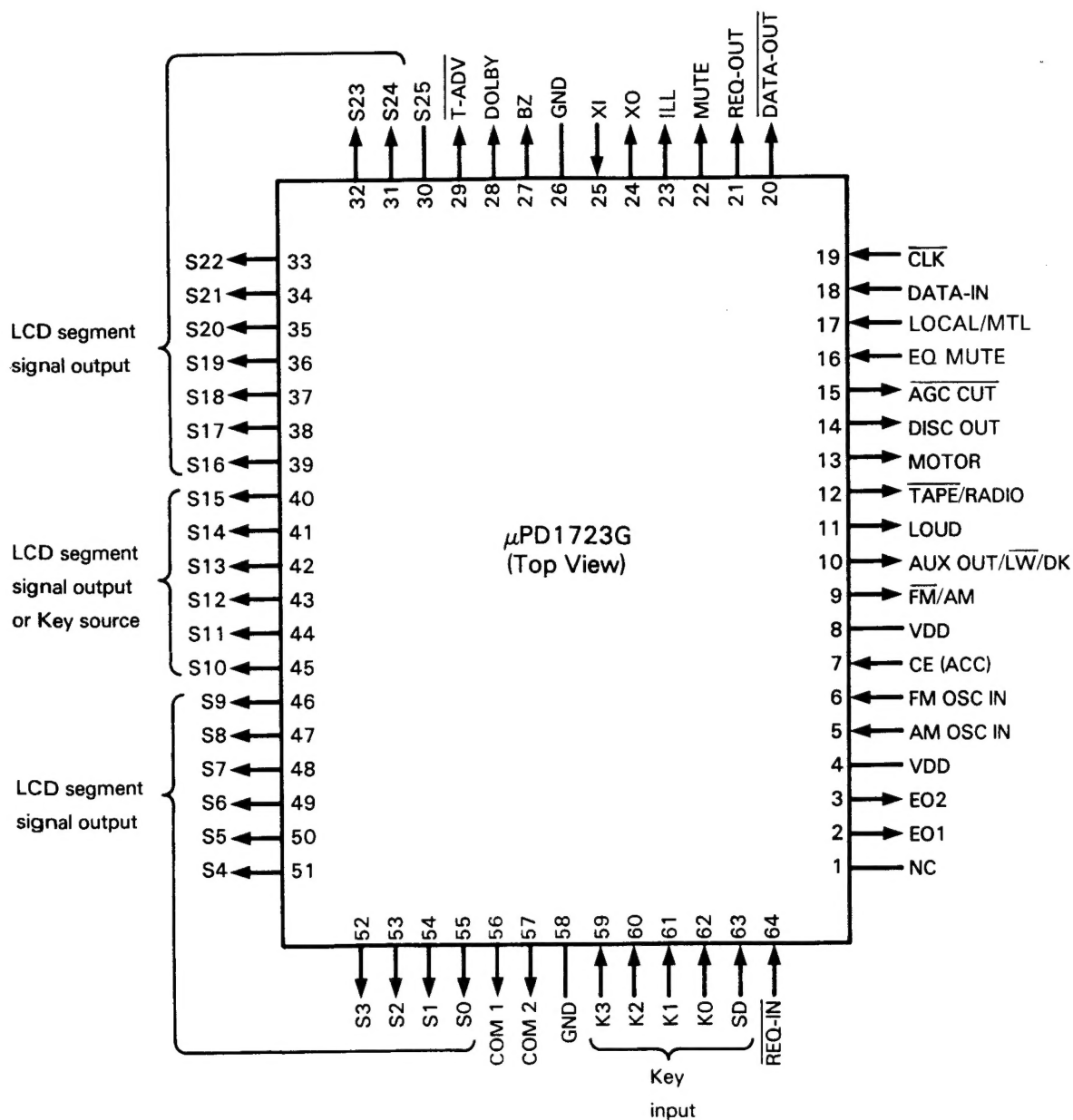
## CIRCUIT DESCRIPTION

1723GF-605-3BE (IC9: X14-344X-XX)

1723GF-606-3BE (IC9: X14-351X-XX)

Microprocessor IC

### Terminal Connections



## CIRCUIT DESCRIPTION

## Terminal descriptions

Pin No.	Pin Name	I/O	Function Name	Operation
1	NC		NC	
2	EO1	O	EO1	PLL error output terminals. If the frequency obtained by dividing the local oscillation frequency (VCO output) is higher than the reference frequency, these terminals output "H" level. If not, they output "L" level.
3	EO2	O	EO2	
4	V <sub>DD</sub>		V <sub>DD</sub>	Power input terminal.
5	V COL	I	AM OSC IN	Inputs VCO output from 0.50 to 30 MHz.
6	V COH	I	FM OSC IN	Inputs VCO output from 15 to 200 MHz.
7	CE	I	CE (ACC)	"H" level when it is required that the device operate normally. "L" level when the devices is not used.
8	V <sub>DD</sub>		V <sub>DD</sub>	Power input terminal.
9	PD1	O	FM/AM	FM/AM switching port. Outputs "H" during AM reception. Outputs "L" during FM reception. Fixed at "H" in TAPE, CD modes, and "L" while SDK (SDK type) is ON. During tuner call, the output varies depending on the band.
10	PD2	O	LW/DK	L type: Outputs "L" during LW reception. Also outputs "L" during LW reception in course of tuner call. D type: Volume increase output during DK interrupt. K type: (NC). Permanently "L".
11	PD3	O	LOUD	Loudness control ON/OFF output terminal Switched to "H" or "L".
12	PC0	O	TAPE	TAPE audio switching port. "L" when only TAPE.
13	PC1	O	MOTOR	Cassette mechanism motor ON/OFF control port. Outputs "H" while TAPE IN key is OFF. Outputs "L" in PRP, CD-CH and DK interrupt (SDK type) modes.
14	PC2	O	DISC OUT	Outputs "H" when operating CD changer. Outputs "L" during PRP and DK interrupt (SDK type).
15	PC3	O	AGC CUT	Normally, outputs "L" while CE is "H". Outputs "H" during seek.
16	PA0	O	EQ-MUTE	Muting output for prevention of sound leakage during tape FF/REW. When FF/REW is "L": EQ MUTE output is "L". EQ MUTE is "H" in other modes than tape mode and during DK interrupt.
17	PA1	O	LOCAL/MTL	LOCAL is "H" during seek, SK seek or AME while Local sens is turned ON by the key in the tuner mode. LTL is "H" when MTL is turned ON by the key in the tape mode, and "L" in other cases.
18	PA2	I	DATA-IN	Input terminal of DATA from CD-CH.
19	PA3	I	CLK	Input terminal of CLK from CD-CH.
20	PB0	O	DATA-OUT	Output terminal of DATA to CD-CH.
21	PB1	O	REQ-OUT	Output terminal of requests to CD-CH.
22	PB2	O	MUTE	MUTE output terminal, which outputs "H" in MUTE period. MUTE is not output while CE is "L". If CE turns from "H" to "L" during MUTE output, MUTE also turns from "H" to "L".
23	PB3	O	ILL	Output port is inverted every time ILL key is held (1 sec.). Output port state is held during backup.
24	XO	O	XO	X'tal connection terminals.
25	XI	I	XI	
26	GND		GND	
27	CGP	O	BZ	Beep sound pulse output port. Outputs 2.0 kHz pulse for 60 ms.
28	PL3	O	DOLBY	Dolby control output terminal. Outputs "H" when Dolby is ON.
29	PL2	O	T-ADV	T-ADV control output terminal. Outputs "L" only when T-ADV and alternate S W FF/REW are ON in TAPE mode. Flashing pulse is output when CE is "L" while security LED is in flashing mode.
30 ~ 39	LCD25 ~ 16	O	S25 ~ 16	Segment output terminals.

## CIRCUIT DESCRIPTION

## Terminal descriptions

Pin No.	Pin Name	I/O	Function Name	Operation
40	LCD15/KS15	O	S15	Segment output and key source terminals.
41	LCD14/KS14		S14	
42	LCD13/KS13		S13	
43	LCD12/KS12		S12	
44	LCD11/KS11		S11	
45	LCD10/KS10		S10	
46~55	LCD9~LCD0	O	S9~S0	Segment output terminals.
56	COM1	O	COM1	Common output terminals.
57	COM2	O	COM2	
58	GND		GND	
59	K3	I	K3	Key input terminals.
62	K0		K0	
63	AD	I	SD	Station detection input terminal. Inputs "H" when a station is detected.
64	INT	I	REQ-IN	Input terminal for requests from CD-CH.

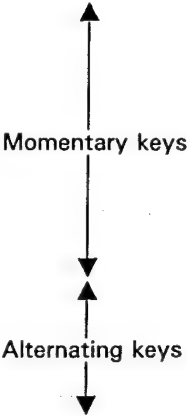


CIRCUIT DESCRIPTION

KEY MATRIX

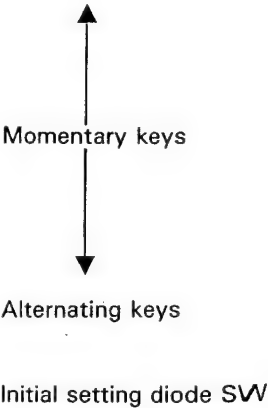
D type

	K0 (62)	K1 (61)	K2 (60)	K3 (59)
KS10 (45)	CLK	AM/DISC –	1/T-ADV	4/SCN
KS11 (44)	LO.S/AME	FM/DISC +	2/DOLBY	5/T-C/D-SCN
KS12 (43)	AUTO/SK.S	UP/TRACK +	3/MTL/REP	6/RDM
KS13 (42)	LOUD/ILL	DOWN/TRACK –	DISC	SDK
KS14 (41)	TAPE-IN	FWD/REV	FF, REW	ST
KS15 (40)		SK	DK-IN	



L, K type

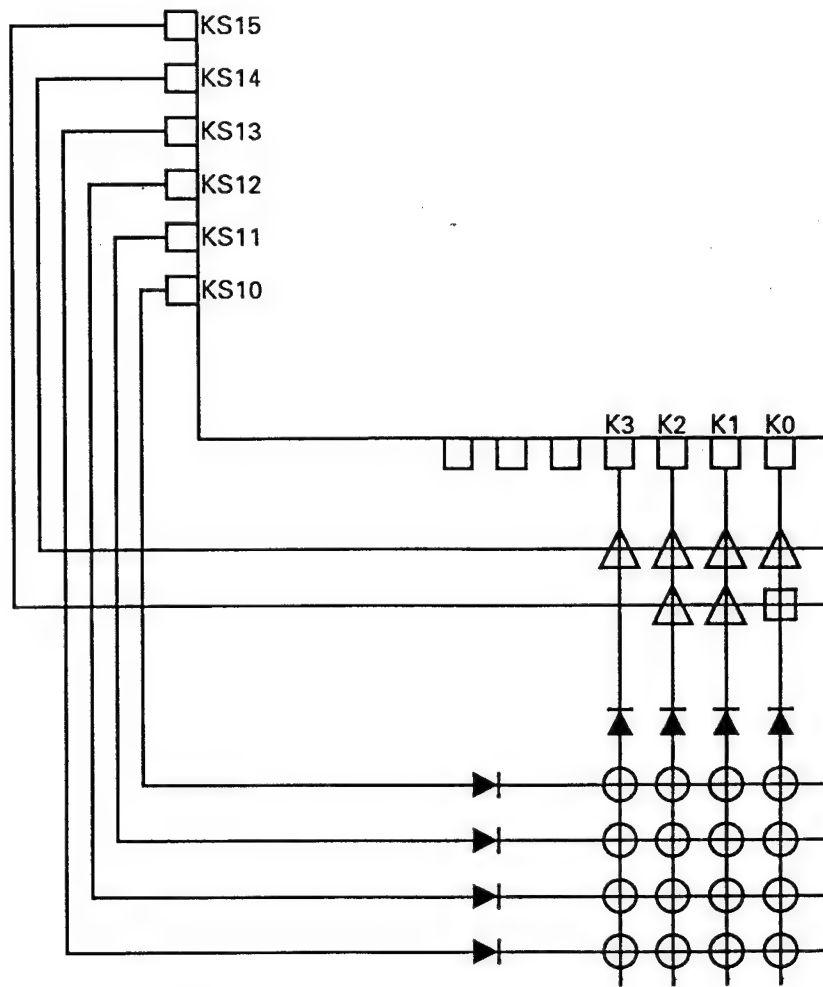
	K0 (62)	K1 (61)	K2 (60)	K3 (59)
KS10 (45)	CLK	AM/DISC –	1/T-ADV	4/SCN
KS11 (44)	LO.S/AME	FM/DISC +	2/DOLBY	5/T-C/D-SCN
KS12 (43)	AUTO	UP/TRACK +	3/MTL/REP	6/RDM
KS13 (42)	LOUD/ILL	DOWN/TRACK –	DISC	PRP
KS14 (41)	TAPE-IN	FWD/REV	FF, REW	ST
KS15 (40)	BAND			



BAND	DESTINATION	Remark
On	U.S.A.	Switchable to KN type (general destination).
Off	Europe	With LW band, without SDK

## CIRCUIT DESCRIPTION

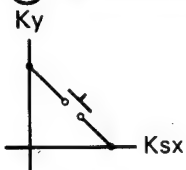
Key matrix configuration and model



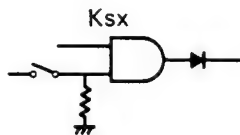
△ Alternate key

□ Initial-setting diode switch

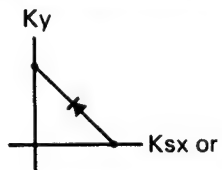
○ Momentary key



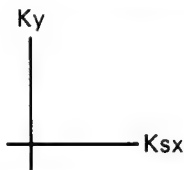
Momentary key



Alternate key



Initial-setting diode switch



## CIRCUIT DESCRIPTION

## Operations related to panel detachment/attachment

## • Set illumination lighting by position lamp lighting

Even when ACC is OFF (power OFF), the lamps on the X89 LCD PC board can be lighted if the position lamps of the car are lighted, regardless of the detached/attached state of the panel. The set can naturally be illuminated when ACC is ON and the panel is attached (or TPC7 is connected to GND) even when the position lamps are OFF. In this case, the LED on the X25 panel PC board is also lighted.

## • ACC detection

ACC (power ON) is detected by Q32, but the power to the set is turned ON only when the emitter of Q32 (TPCDET) is connected to GND (that is, TPC7 is grounded or the panel is attached).

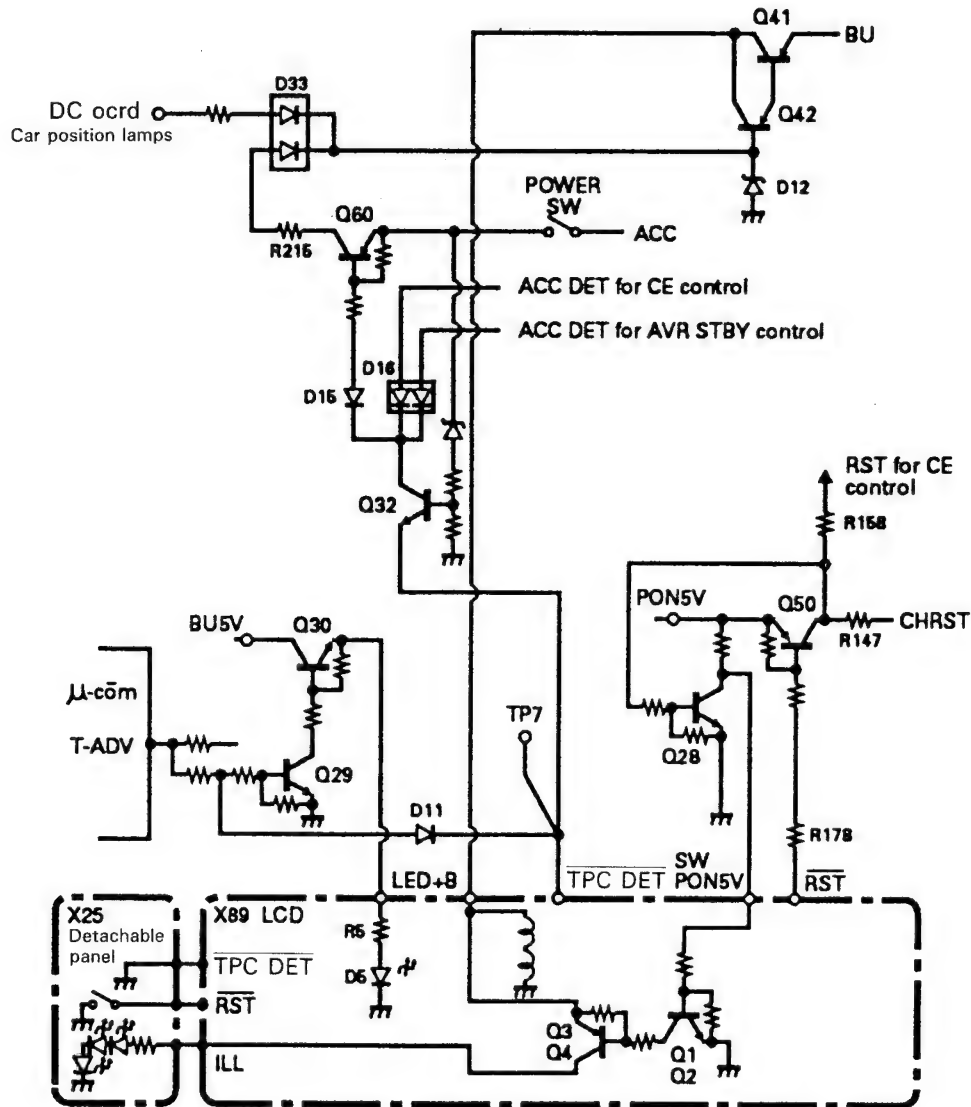
## • Panel detached/attached illumination terminal on X89

To prevent voltage from being generated at the ILLUM terminal when the panel is detached (to prevent damage in case of short-circuit), the panel detachment/attachment illumination terminal inhibits Q1 to Q4 with P-on 5 V.

## • X89 flashing LED (D5)

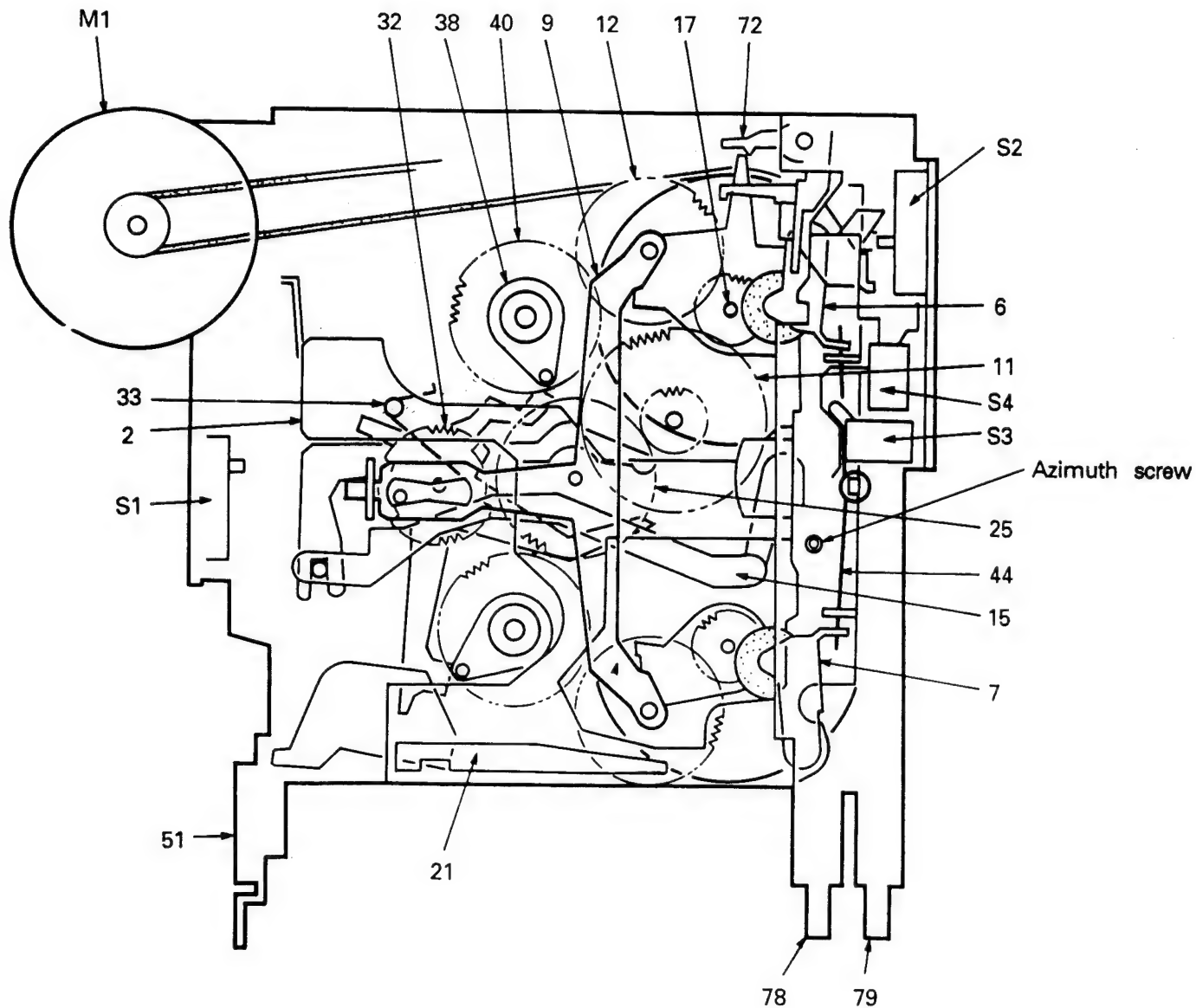
While the panel is detached, the LED (D5) on X89 is designed to flash for the car security.

The flashing mode can be turned ON/OFF when power is turned ON by pressing keys 1 and 3 simultaneously. LED + B which causes the LED to flash is output as a pulse from the T-ADV port of  $\mu$ -COM when  $\mu$ -COM CE is "L" and the flashing mode is ON. When the panel is detached, the pulse turns Q29 ON/OFF to supply the flashing voltage through LED + B.



# KRC-653D/L

## MECHANISM OPERATION DESCRIPTION

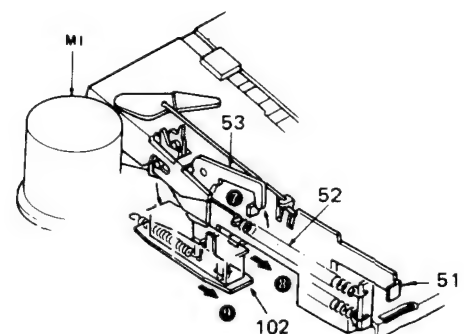
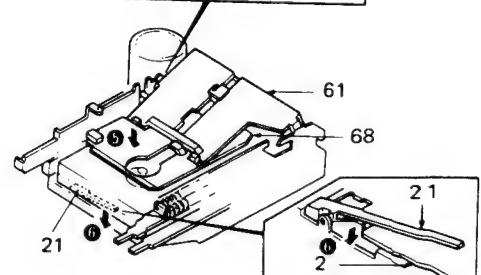
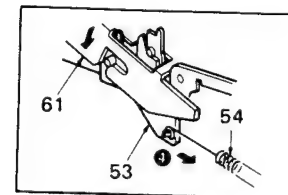
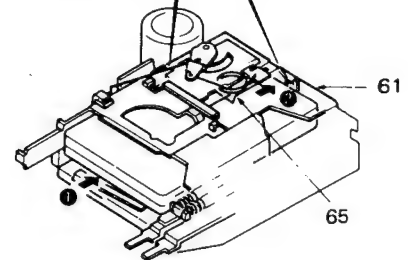
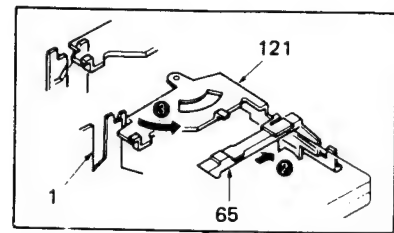


# KRC-653D,

## MECHANISM OPERATION DESCRIPTION

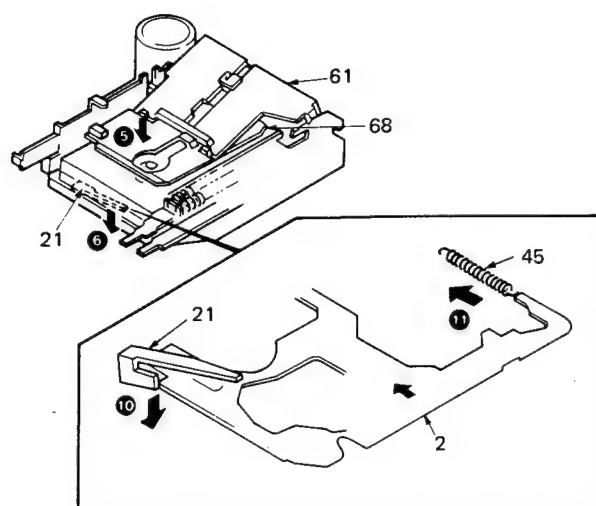
### LOADING/PLAY

1. Insert a cassette tape (1).
2. The cassette guide (65) pushes to lever (reverse [121]) (2).
3. The lever (reverse [121]) turns in the direction of the arrow and releases the lock of the holder (action plate [61]) (3).
4. Through the lock release of the lever (reverse [121]), the arm (action [53]) is pulled by the tension spring (54), which turns the holder (action plate [61]). The holder (action plate) descends (4).
5. Through the descent of the holder (action plate [61]), the holder (cassette case [68]) also descends (5).
6. As the holder (cassette case [68]) descends, the cassette tape pushes the lever (lock plate [21]). The lever (lock plate [21]) then releases the lock of the lever assembly (head plate [2]) (6).
7. As the arm (action [53]) turns, the lock of the lever assembly (eject [51]) is released (7).
8. The lever assembly (eject [51]) is pulled by the tension spring (52) and moves forward (8).
9. Through the movement of the lever assembly (eject [51]), the lever (102) also moves forward and turns on the slide switch S1. As the slide switch S1 is turned on, electricity is supplied to the motor assembly (M1) (9).

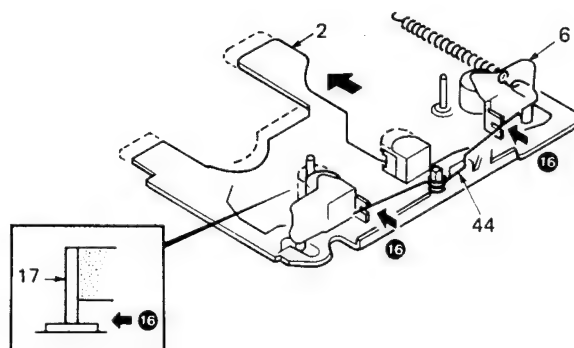


## MECHANISM OPERATION DESCRIPTION

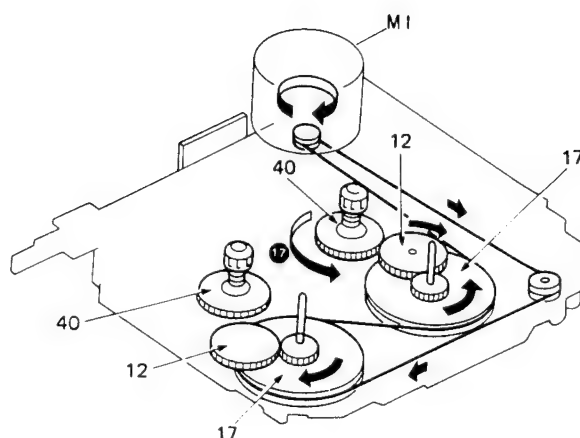
10. As the holder (cassette case [68]) descends, the cassette tape pushes the lever (lock plate [21]) then releases the lock of the lever assembly (head plate [2]) (10).
11. The lever assembly (head plate [2]) is pulled by the tension spring (45) and moves forward (11).



12. Through the forward movement of the lever assembly (head plate [2]), pinch roller assembly (6) make close contact with the shaft of the flywheel (17) through the formed wire spring (44) (15).



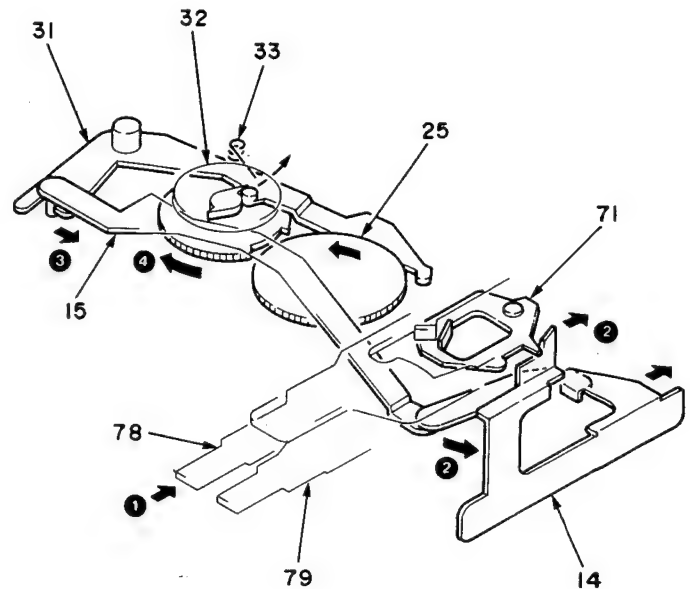
13. The rotation is transmitted from each gear (17-12) to the reel base (40) of the take-up side (17).



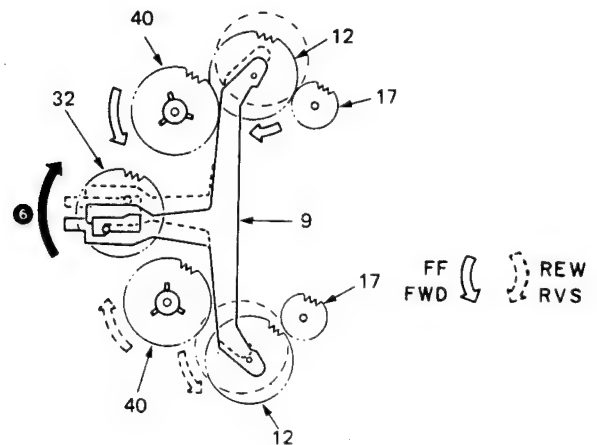
## MECHANISM OPERATION DESCRIPTION

## PROGRAM

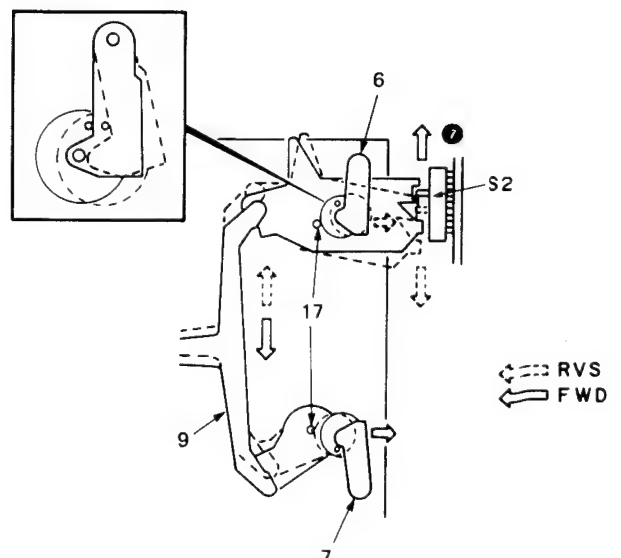
1. Push the FF and REW levers simultaneously (1).
2. The arm assembly (15) moves toward the right (2).
3. The lever (31) is pulled (3), and the changeover gear (32) is unlocked.
4. The changeover gear is pushed by the torsion spring (33), and engaged with the cam gear (25) (4).
5. The changeover gear (32) is rotated by a half turn and locked with the lever (31) again.



6. The movement of the boss of the changeover gear (32) moves the changeover arm (9) (6).



7. When the changeover arm (9) moves, the drive direction of the reel base (40), head switch (S2) and pinch roller is switched between FWD and RVS (7).

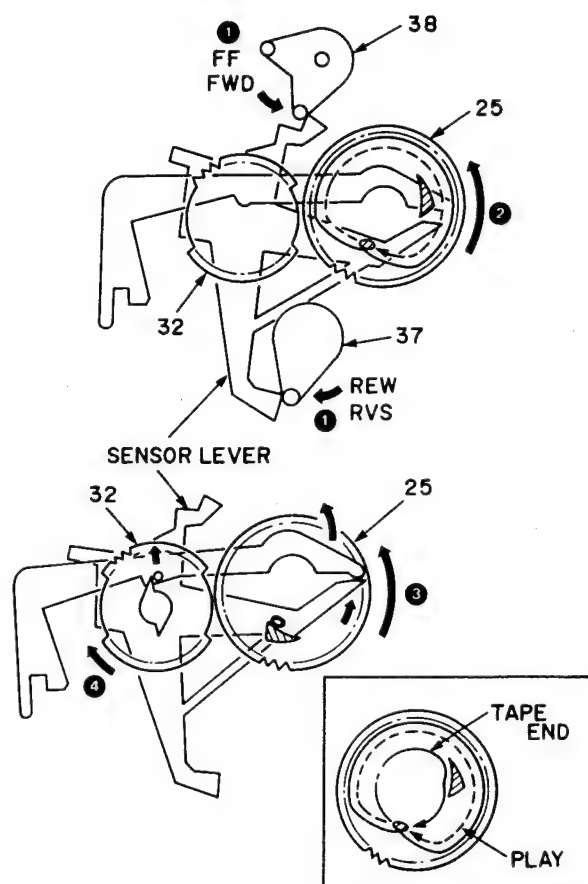


# KRC-653D/L

## MECHANISM OPERATION DESCRIPTION

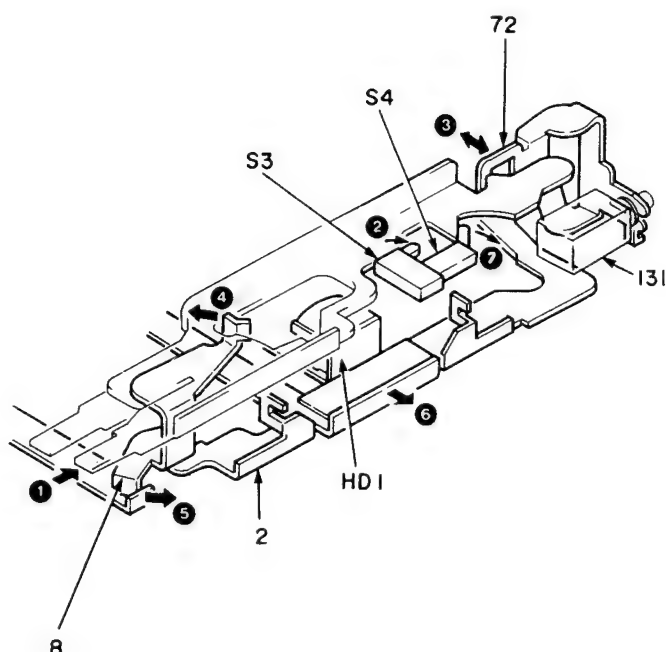
### AUTO REVERSE

1. When the reel base (40) stops rotation at the end of tape, the arm (38) stops pushing the sensor lever (1).
2. The sensor lever is engaged with the cam projection of the cam gear (25) and carried until the intermediate point of the cam gear (2).
3. Then, the sensor lever is carried by the triangular boss of the cam gear (25) and pushes the lock lever (3).
4. When the lock lever is pushed, the changeover gear rotates and the program operation starts (4).



### FF

1. Push the lever FF (79) (1).
2. Pushing the lever FF (79) closes the leaf switch (S3) and muting is applied (2).
3. The lever FF (79) is locked by the arm (72) (3).
4. By pushing the lever FF (79), the lever (8) is pushed in the direction of arrow (4).
5. Through being pushed, the lever (8) moves the lever assembly (head plate [2]) backward a little (5). The playback head (HD1) and pinch roller also moves backward a little.
6. The rotation of the reel base (40) is high-speeded by the speed selector switch (S4) (6).
7. In the operation of T.ADV, electricity is supplied to the solenoid (131), which attracts the arm (FR release [72]). The lock on the arm (FR release [72]) is released, FF is released and FWD PLAY is engaged.

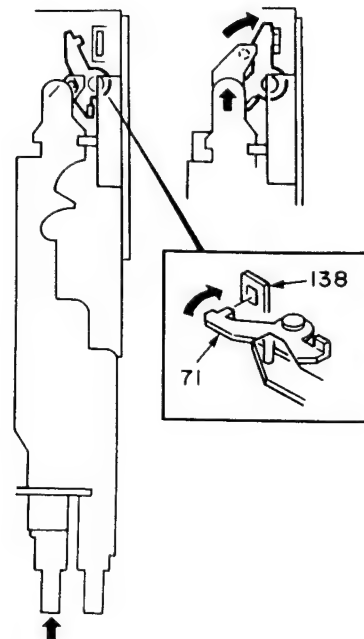
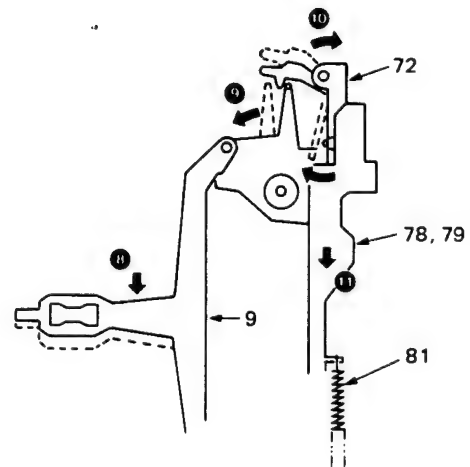
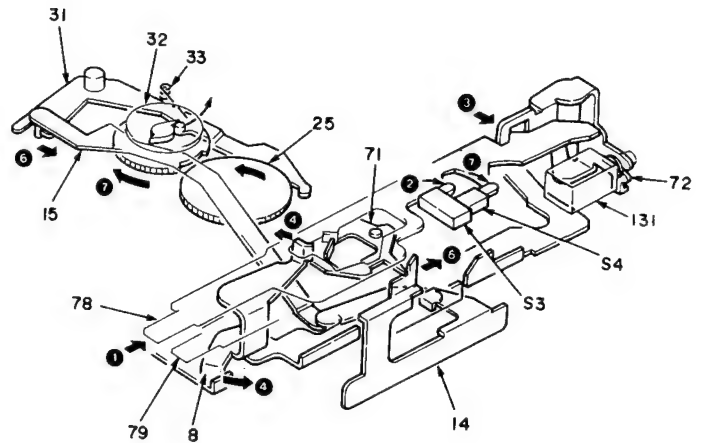




## MECHANISM OPERATION DESCRIPTION

## REW

1. Push the lever REW (78) (1).
2. Pushing the lever REW (78) closes the leaf switch (S3) and muting is applied (2).
3. The lever REW (78) is locked by the arm (72) (3).
4. By pushing the lever REW (78), the lever (8) is pushed in the direction of arrow (4).
5. Through being pushed, the lever (8) moves the lever assembly (head plate [2]) backward a little (5). Through the backward movement of the lever assembly, the playback head (HD1) and pinch roller (7) also moves backward a little.
6. This time, the lever REW (78) moves the arm assembly (15) and PROGRAM operation is engaged (6).
7. The rotation of the reel base (40) is high-speeded by the speed selector switch (S4) (7).
8. At the tape end during the operation of REW, the end sensor is activated, and the changeover arm (9) moves the arm (72) during the operation of PROGRAM (8) (9) (10). The lever REW (78) is released (11).
9. To release REW, slightly depress the lever FF (79).
10. By depressing the lever FF (79), the arm (72) moves, and the lever REW (78) returns by the tension spring (81) (11).
11. In the operation of T.ADV, electricity is supplied to the solenoid (131), which attracts the arm (FR release [72]). The lock on the arm (FR release [72]) is released, REW is released, and RVS PLAY is engaged.
12. In the channel select operation of this time, the actuator (138) is locked with a hook (71) so that the head select switch does not switch.

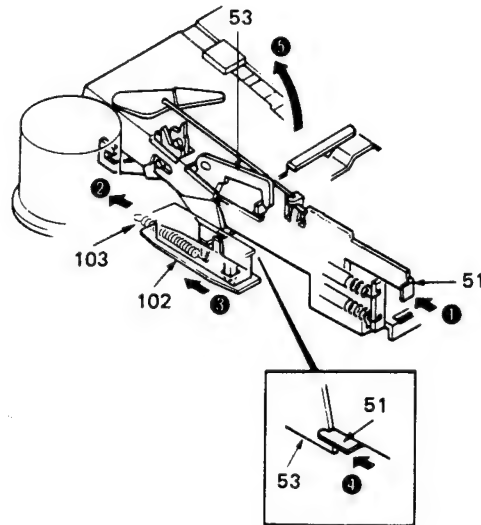


# KRC-653D/L

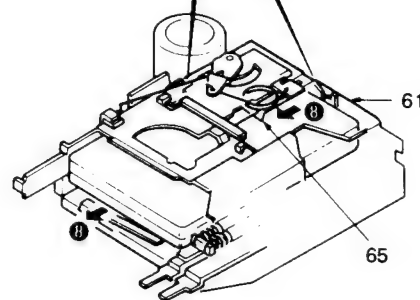
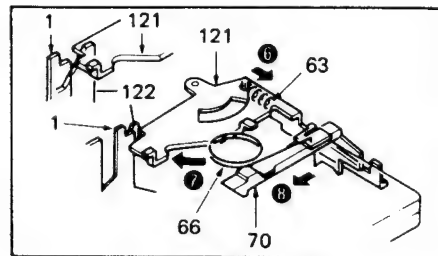
## MECHANISM OPERATION DESCRIPTION

### EJECT

1. Push the lever assembly (eject [51]) (①).
2. By pushing the lever assembly (eject [51]), the tension spring (103) pushes the lever (102) (②).
3. Though pushing the lever (102), the slide switch (S1) is turned off, and the lever assembly (head plate [2]) moves backward (③).
4. The lever assembly (eject [51]) pushes and turns the arm (action [53]) (④).
5. By turning, the arm (action [53]) pushes up the holder (action plate [61]) (⑤).



6. When the holder (action plate [61]) is pushed up, the lever (reverse [121]) is pulled by the tension spring (63) and turns (⑥).
7. In turning, the lever (reverse [121]) is put on the lever of the mechanism chassis (122) (⑦).
8. The cassette guide (65) is pushed forward by the torsion coil spring (66), and the cassette tape is ejected (⑧).



## ADJUSTMENT

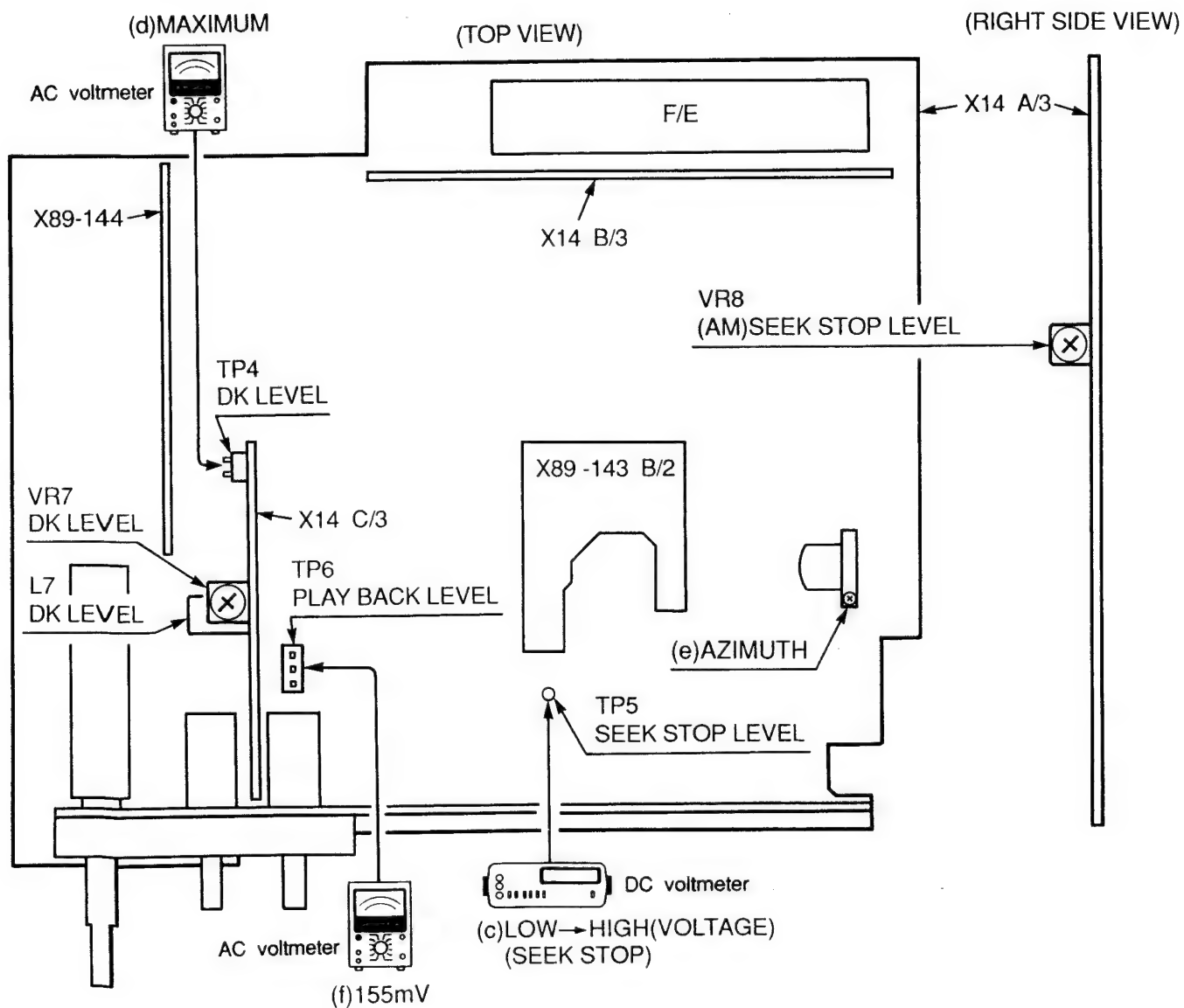
Set the controls and switches as follows.

BALANCE :center position    LOUD :OFF    LOCAL :OFF  
 FADER :center position    T·ADV :OFF    AUTO :OFF  
 BASS :center position    METAL :OFF  
 TREBLE :center position    DOLBY NR :OFF

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER(RECEIVER) SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
FM SECTION							
1	DISCRIMINATOR	(A) 98.1MHz 0 dev 60dBμ(Ant input)	Connect the DC voltmeter between pins of TP1.(X14 B/3)	FM 98.1MHz	L6 (X14 B/3)	0V	(a)
2	SEPARATION	(C) 98.1MHz 1kHz,±40kHz dev Pilot:±7.5kHz dev Selector:L or R 60dBμ(Ant input)	(B)	FM 98.1MHz	VR5 (X14 B/3)	Adjust it so that the crosstalk from L to R and R to L become minimum.	
3	ANRC	(C) 98.1MHz 1kHz,±40kHz dev Pilot:±7.5kHz dev Selector:L or R 35dBμ(Ant input)	(B)	FM 98.1MHz Connect a lead wire between TP3 and GND	VR4 (X14 B/3)	Separation 10dB	
4	SEEK STOP LEVEL	(A) 98.1MHz 1kHz,±40kHz dev 20dBμ(Ant input)	Connect the DC voltmeter to TP5 (X14 A/3)	FM SEEK:ON 98.1MHz	VR8 (X14 A/3)	Low→High(Voltage) (Seek stop)	(c)
5	VCO	(A) 98.1MHz 0 dev 60dBμ(Ant input)	Connect a frequency counter to TP2 (2) and GND	FM 98.1MHz Connect a R(180KΩ) between TP2(1) and GND	VR6 (X14 B/3)	19KHz	(b)
SDK SECTION (KRC-653D Only)							
6	DK LEVEL	(E) 98.1MHz 0 mod SK 5.33% DK 30% BK 60% 60dBμ(Ant input)	Connect a AC voltmeter to TP4 (X14 A/3)	FM 98.1MHz SDK:OFF	L7 VR7 (X14 C/3)	Maximum	(d)
MW SECTION							
(1)	SEEK STOP LEVEL	(D) 999kHz 400Hz,30% mod 35dBμ(Ant input)	Connect the DC voltmeter to TP5(X14 A/3)	MW 999kHz	VR8 (X14 A/3)	Low→High(Voltage) (Seek stop)	
CASSETTE DECK SECTION							
[1]	AZIMUTH	MTT-114 10kHz	(B)	TAPE PLAY	Head Azimuth Screw	Adjust the azimuth for each L CH/R CH or FWD/RVS becomes maximum.	(e)
[2]	PLAYBACK LEVEL	MTT-150	Connect a AC voltmeter to TP6(X14 A/3)	TAPE PLAY	VR1(L) VR2(R) (X14 B/3)	155mV	(f)

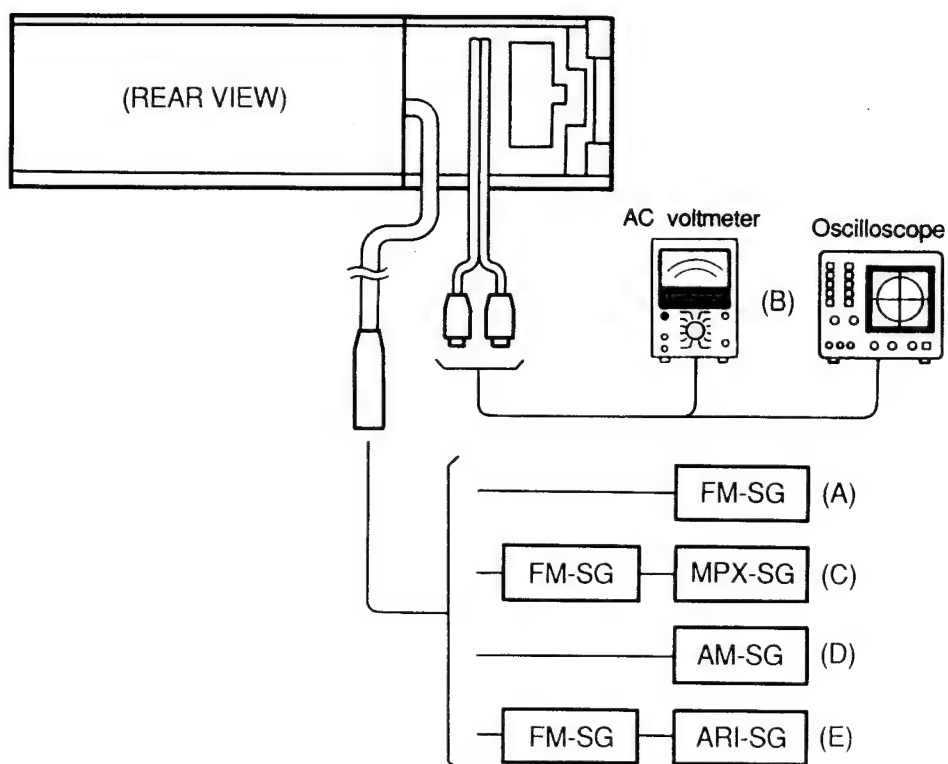
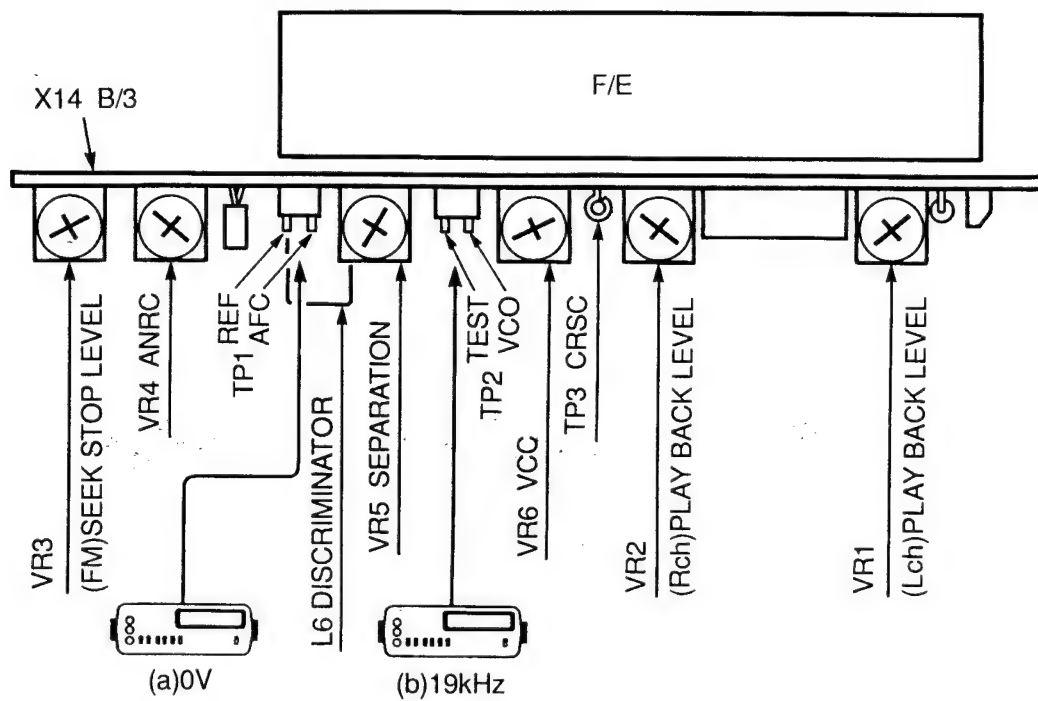
KRC-653D/L (E)

## ADJUSTMENT



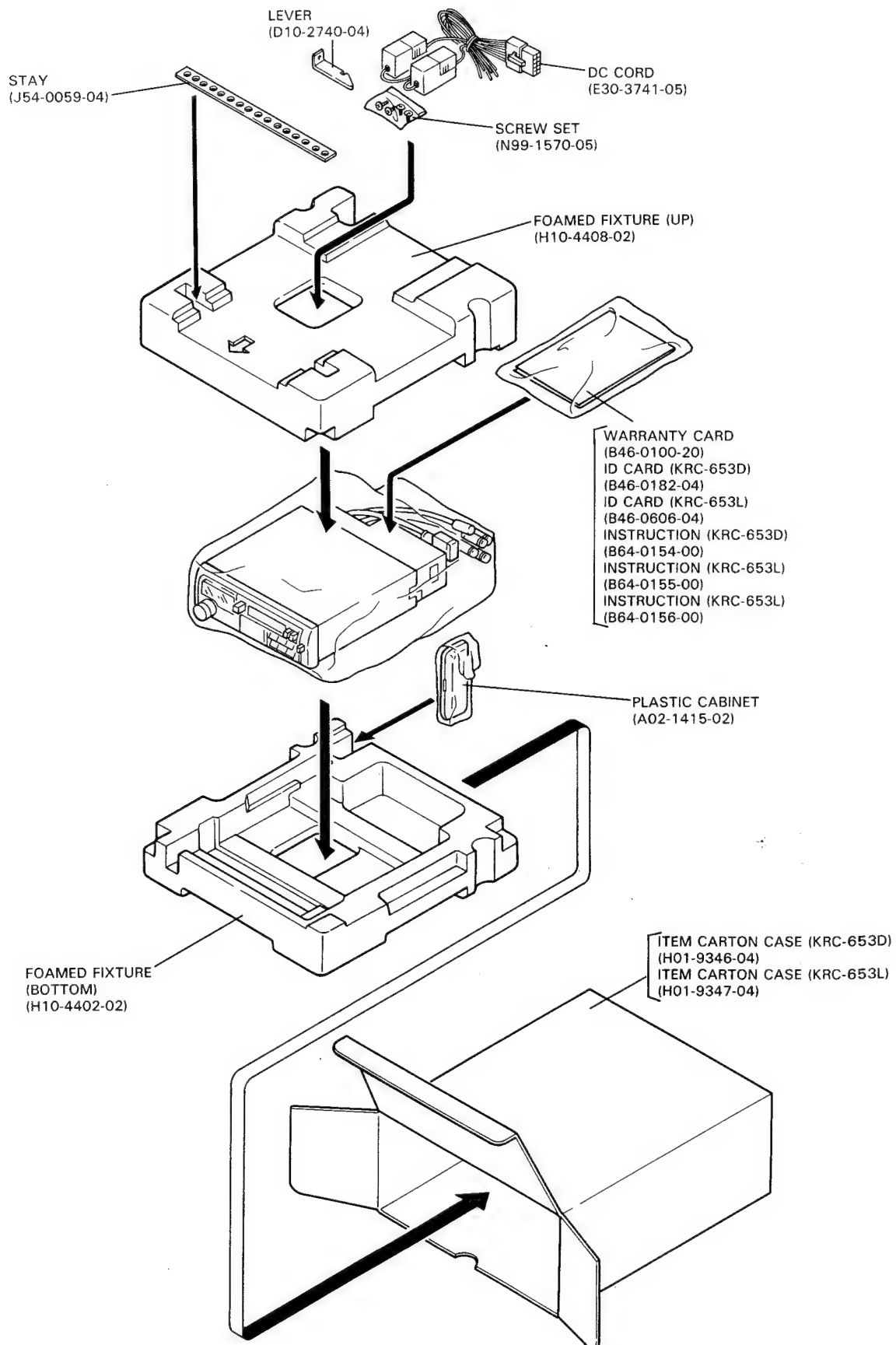
## ADJUSTMENT

### DAUGHTER UNIT ADJUSTMENT



# KRC-653D/L

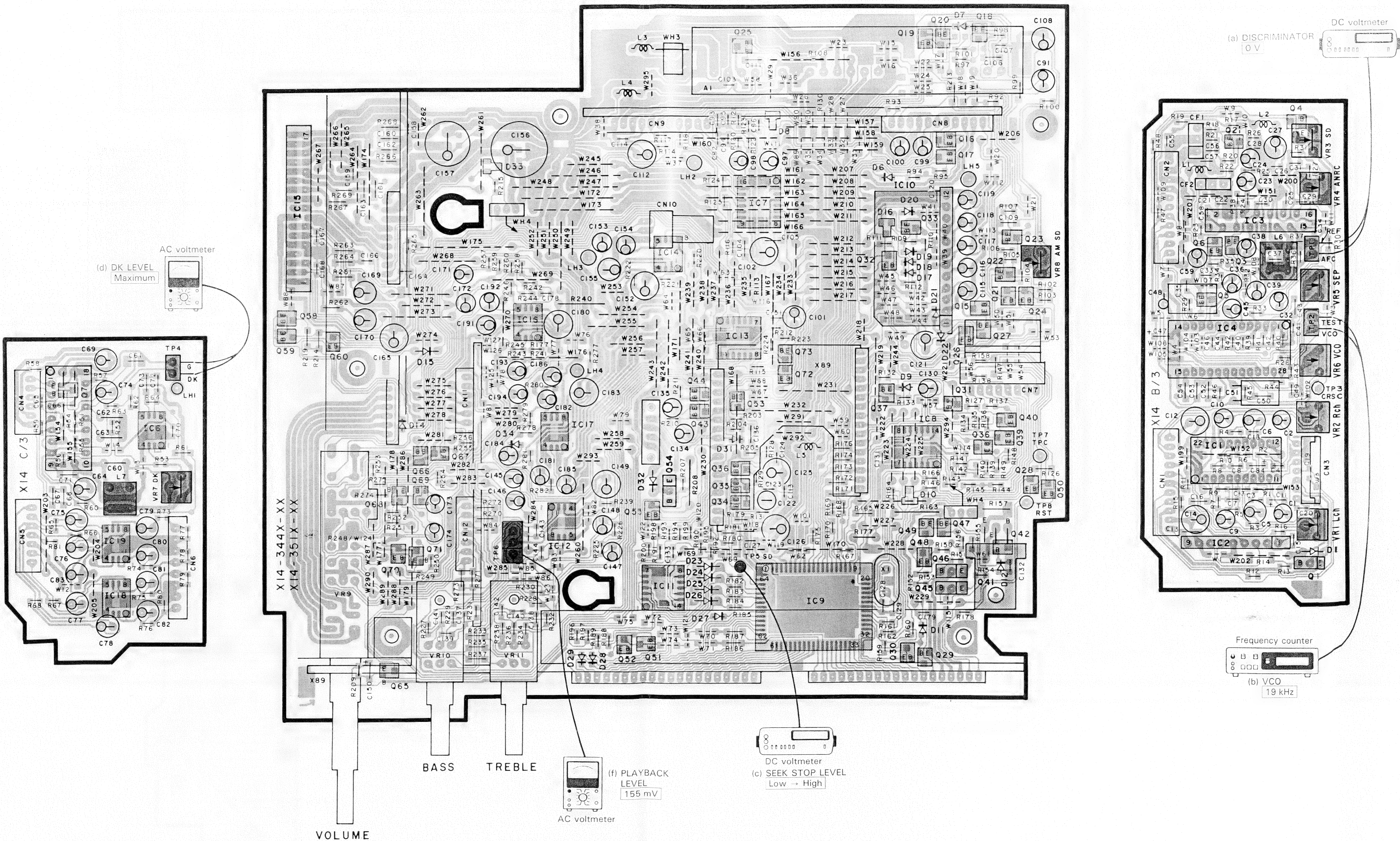
## PACKING





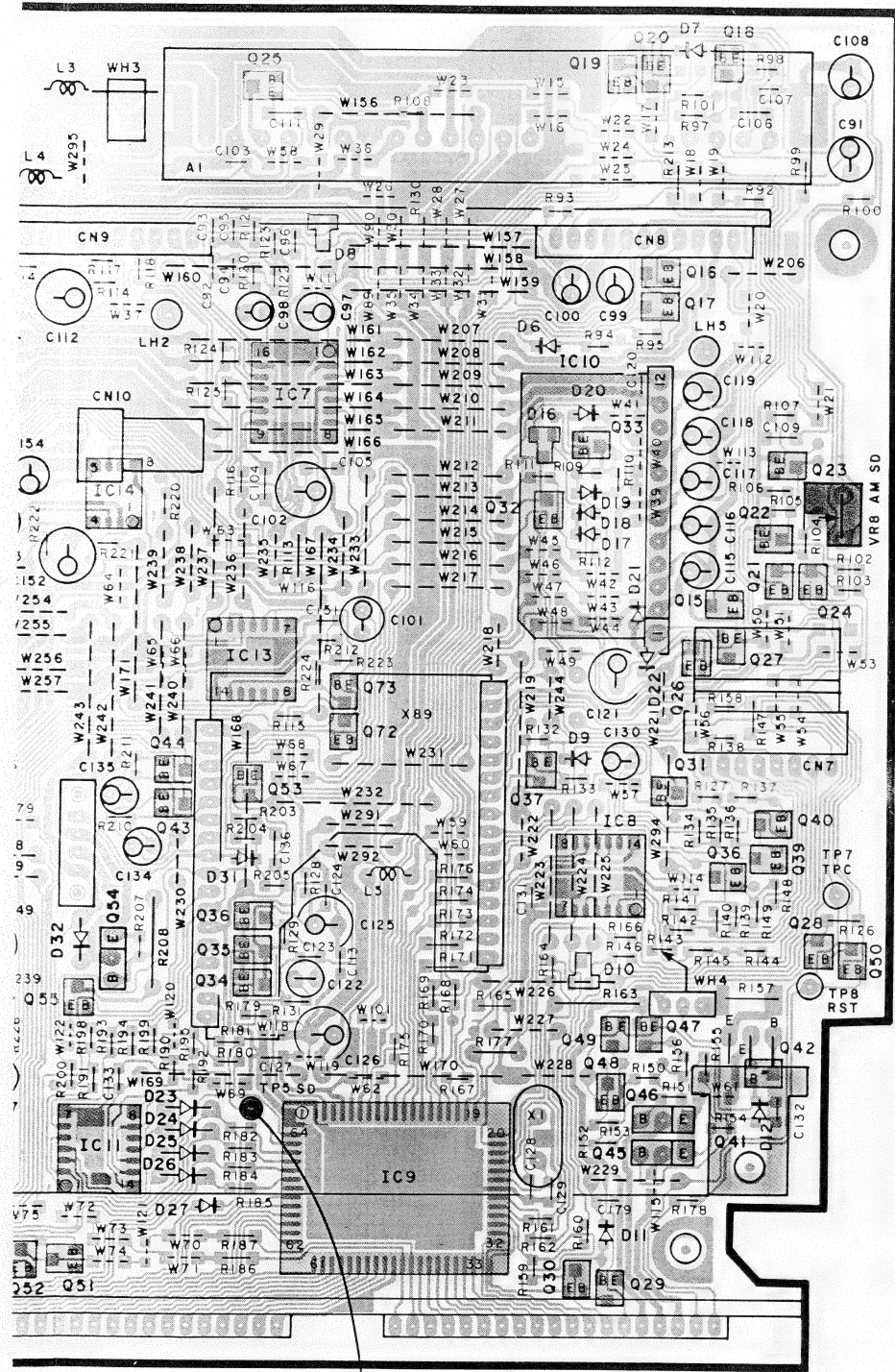
PC BOARD (Component side view)

SYNTHESIZER UNIT (X14-3442-70: D, -71: L)



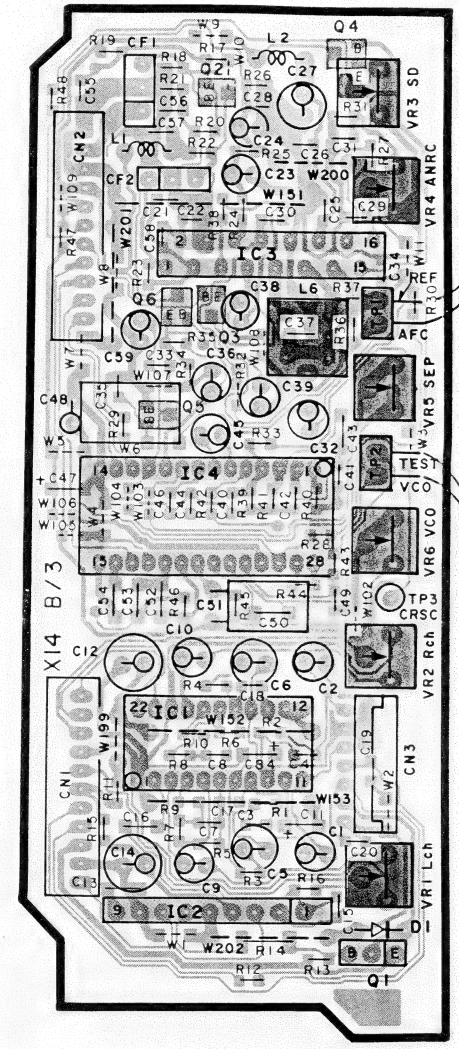


HESIZER UNIT (X14-3442-70: D, -71: L)



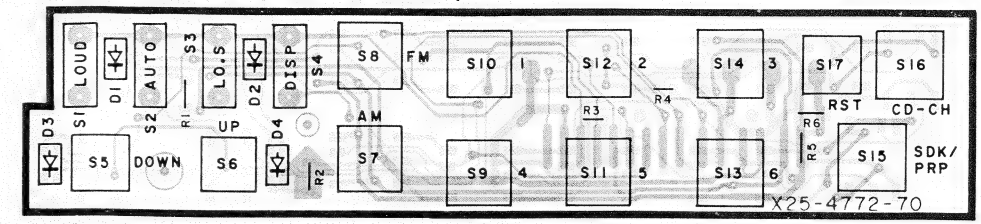
DC voltmeter  
(c) SEEK STOP LEVEL  
Low → High  
155 mV

(a) DISCRIMINATOR  
0 V

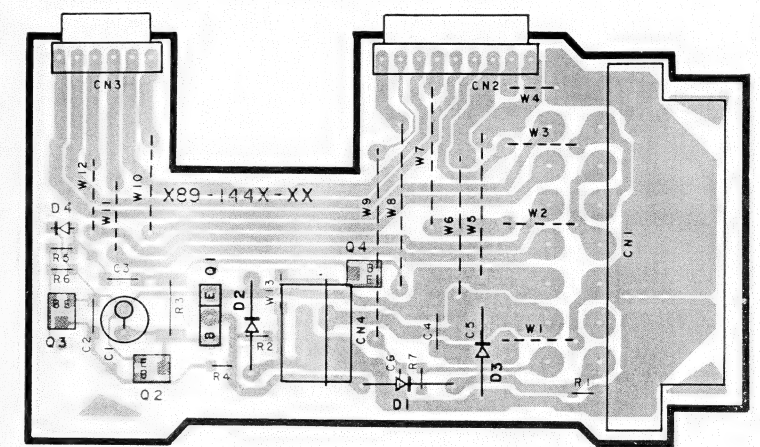


Frequency counter  
(b) VCO  
19 kHz

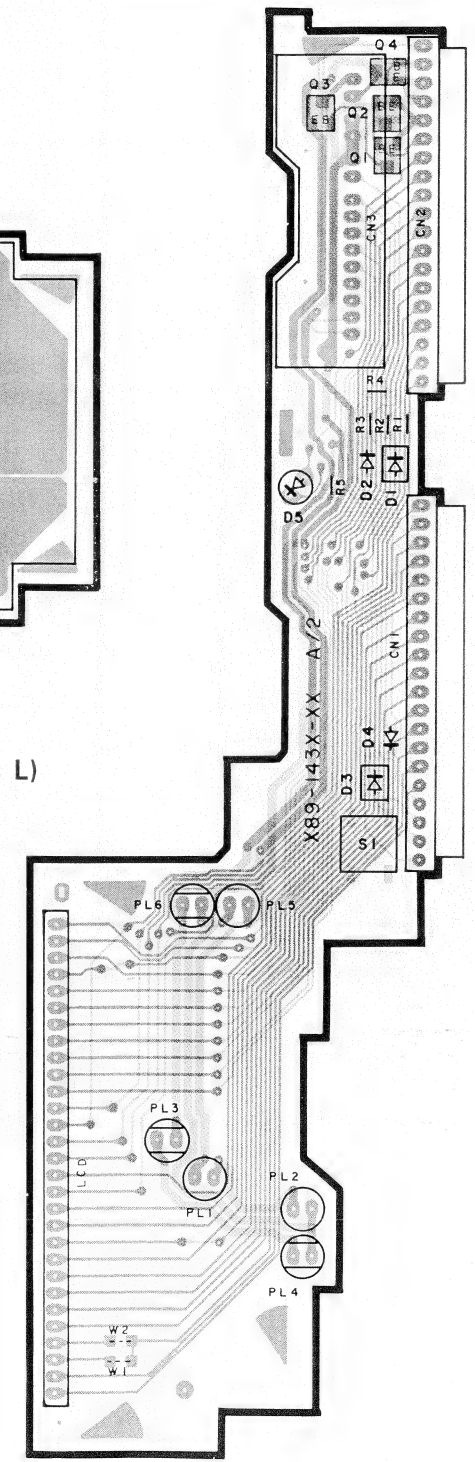
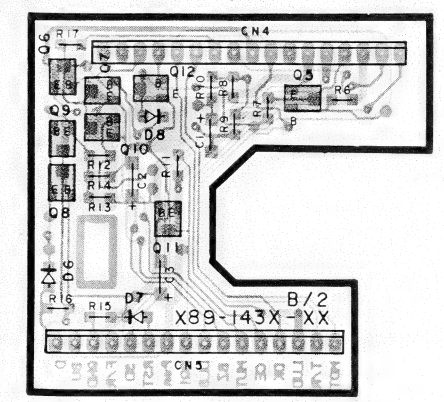
SWITCH UNIT (X25-4772-70)



DAUGHTER UNIT (X89-1442-70)



DAUGHTER UNIT (X89-1432-70: D, -71: L)



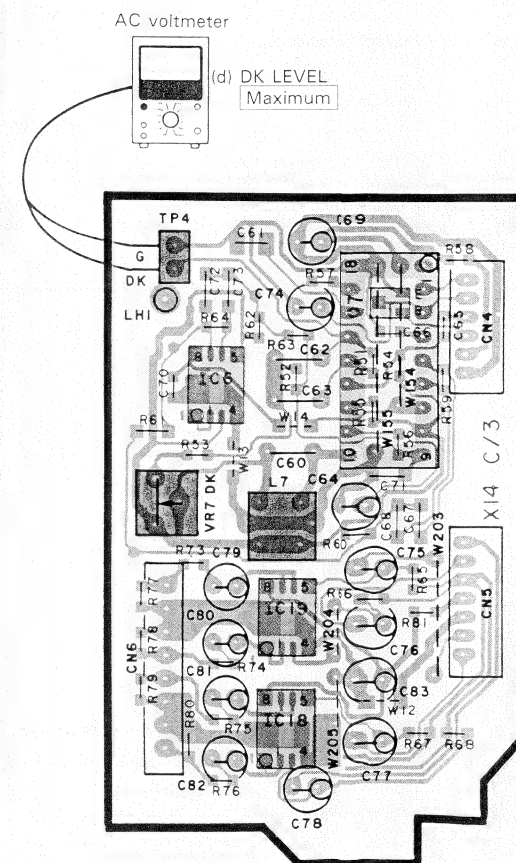
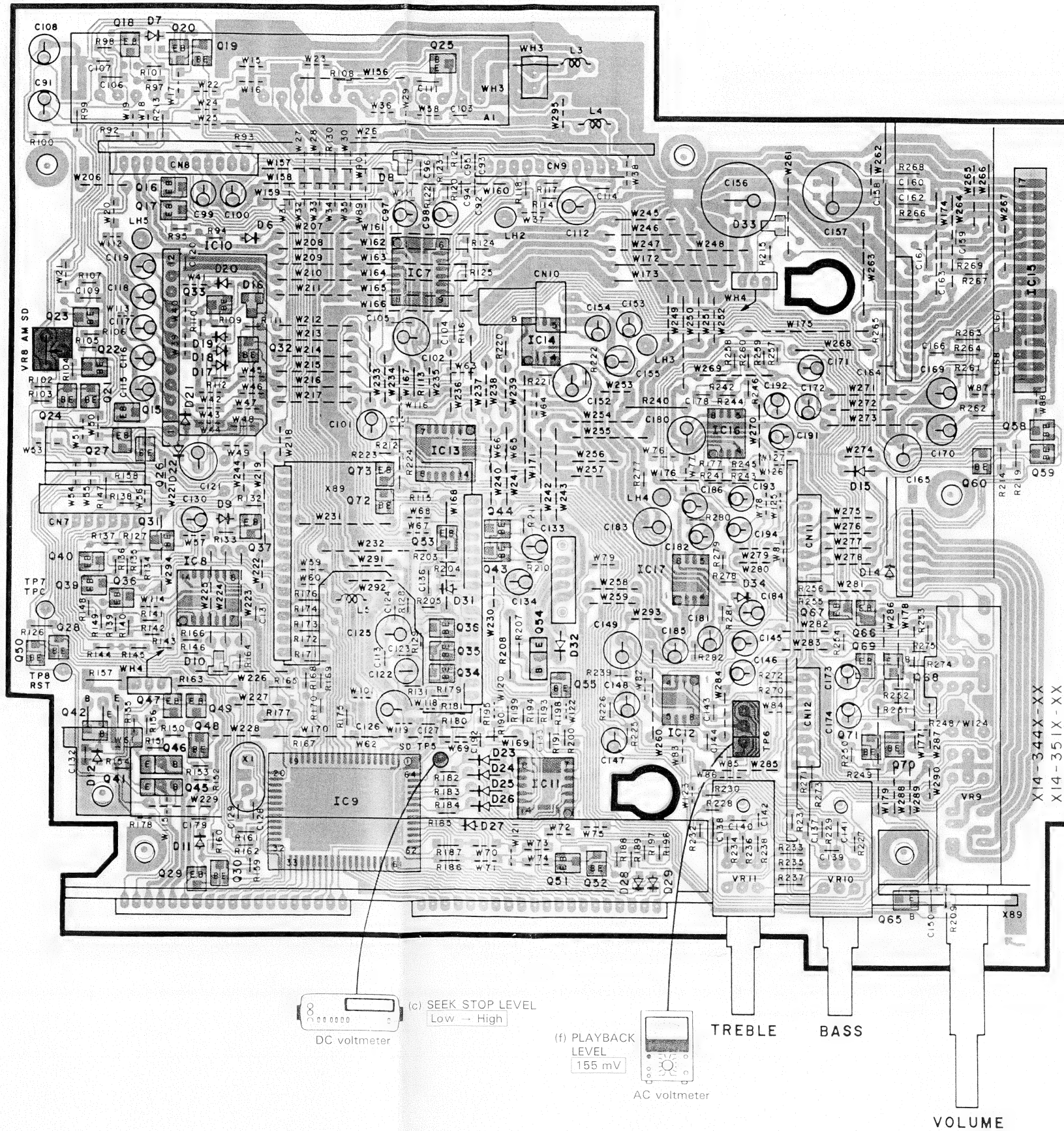
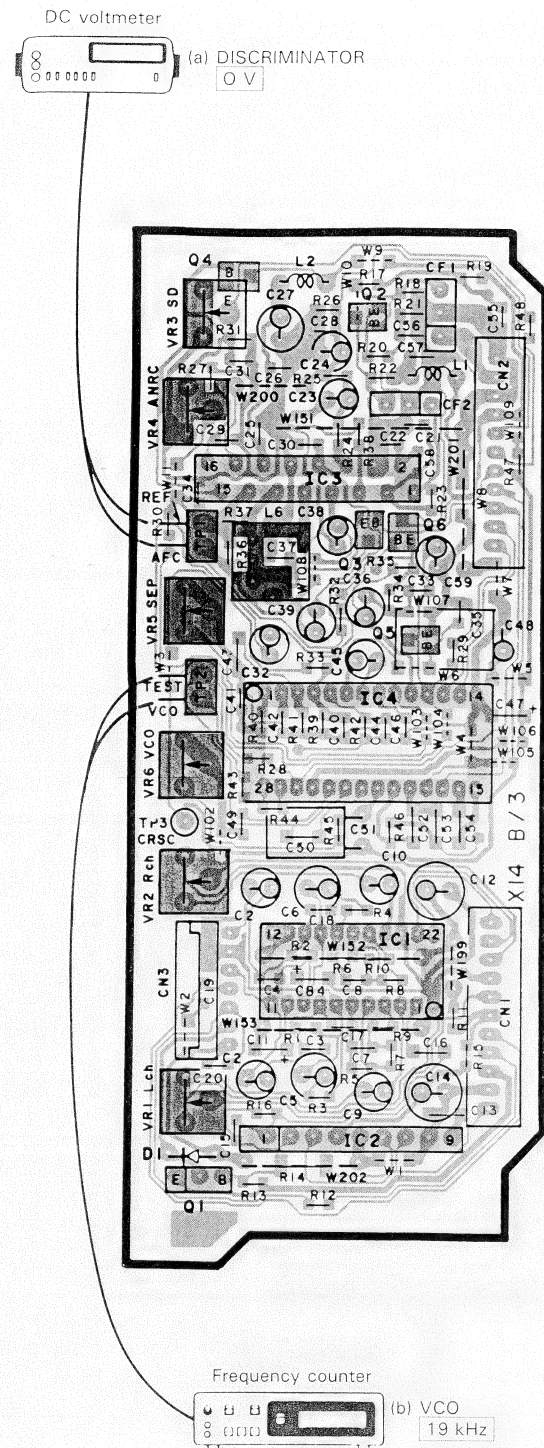
Refer to the schematic diagram for the values of resistors and capacitors.







# SYNTHESIZER UNIT (X14-3442-70: D, -71: L)





1  
2  
3  
4  
5  
6  
7

IC7  
IC8  
IC9  
IC10  
IC11  
IC12,16,17  
IC13  
IC14  
IC15

HA12134AF  
TC74HC04AF  
Refer to Partslist  
BA3906-V1  
TC4081BF  
NJM4565MD  
TC4066BF  
BA3121F  
TA8215H

Q15,19,24,25,27,29,39,40,47-49,58  
59,72,73  
Q16,21-23,31,32,34-36,38,42,51-53  
58,69  
Q17,18,20,30,33,50,60  
Q26  
Q28  
Q37,43,44,65  
Q41  
Q45,46  
Q54  
Q55  
Q66,67,70,71

DTC144EK  
2SC2412K  
DTA144EK  
DTA114EK  
DTC124EK  
2SA1037K  
2SB1370F8  
2SB1277(Q,R)  
2SA1428(O,Y)  
DTC114EK  
2SD1757K

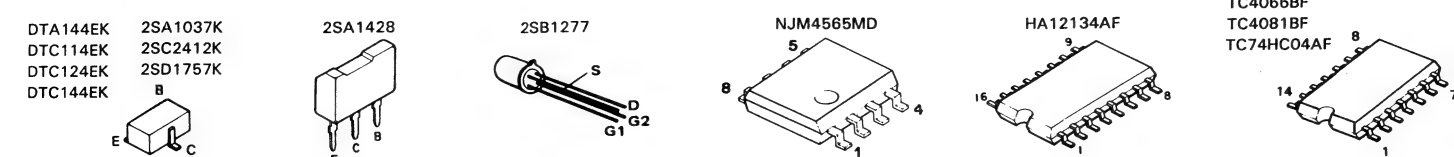
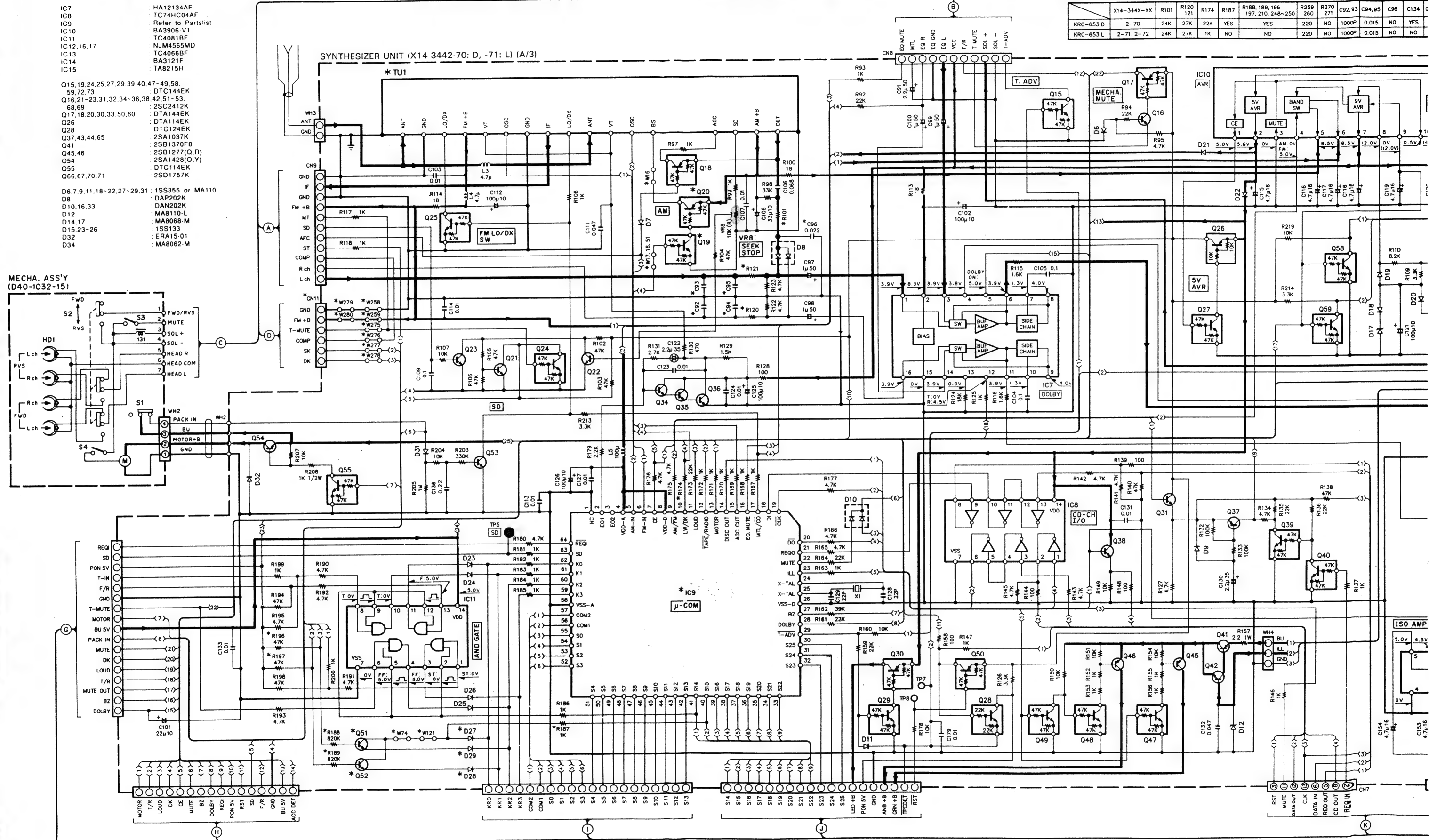
D6,7,9,11,18-22,27-29,31  
D8  
D10,16,33  
D12  
D14,17  
D15,23-26  
D32  
D34

1SS355 or MA110  
DAP202K  
DAN202K  
MA8110-L  
MA8068-M  
1SS133  
ERA15-01  
MA8062-M

MECHA. ASS'Y  
(D40-1032-15)

SYNTHESIZER UNIT (X14-3442-70: D, -71: L) (A/3)

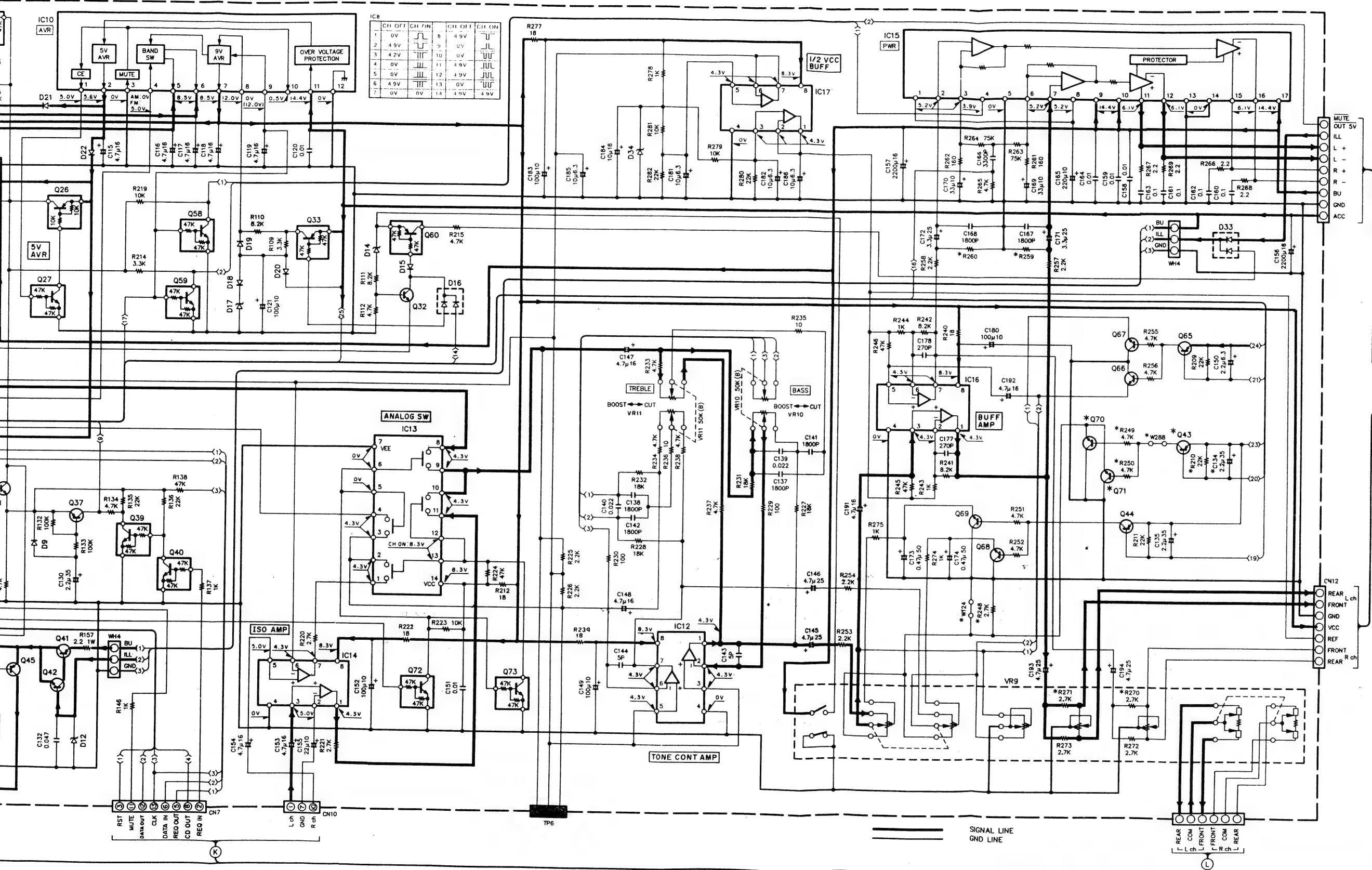
	X14-344X-XX	R101	R120	R174	R187	R188,189,196	R197,210,248-250	R259	R270	C92,93	C94,95	C96	C134
KRC-653 D	2-70	24K	27K	22K	YES	YES	YES	220	NO	1000P	0.015	NO	YES
KRC-653 L	2-71, 2-72	24K	27K	1K	NO	NO	NO	220	NO	1000P	0.015	NO	NO



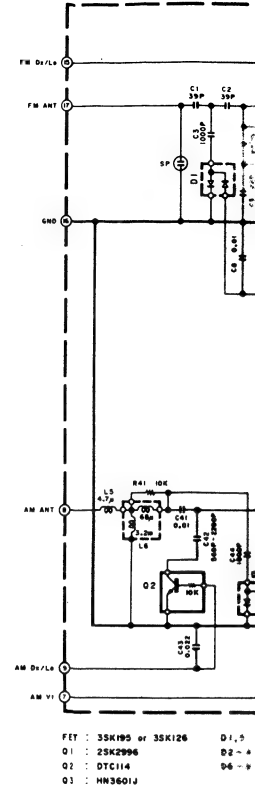
DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. mètre à haute impédance. Les valeurs peuvent varier légèrement en fonction des appareils et aux instruments.

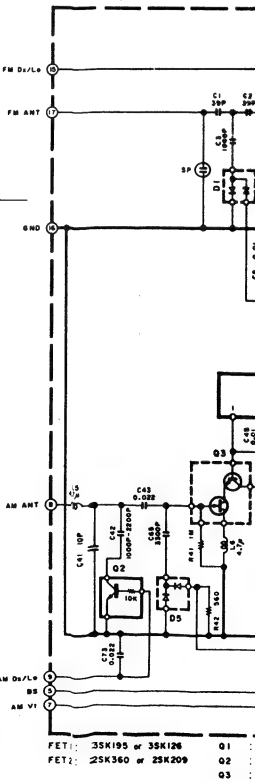
R101	R120	R174	R187	R188, 189, 196	R259	R270	C92, 93	C94, 95	C96	C134	Q19, 20	Q43, 51, 52	D27	D28, 29	IC9	CN11	W16-18	W70	W74, 121, 124, 154, 155	TU1
24K	27K	22K	YES	197, 210, 248-250	220	NO	1000P	0.015	NO	NO	NO	YES	NO	NO	17236F-605-38E	YES	NO	YES	258, 259, 275-280, 288	W02-1326-05
24K	27K	1K	NO	NO	220	NO	1000P	0.015	NO	NO	YES	NO	NO	NO	17236F-606-38E	NO	YES	NO	NO	W02-1327-05



KRC-653D  
TU1: (W02-1326-05)




KRC-653L  
TU1: (W02-1327-05)



measured with a high impedance  
vary slightly due to variations  
in components or/and units.

Les tensions c.c. doivent être mesurées avec un volt-  
mètre à haute impédance. Les valeurs peuvent différer  
légèrement du fait des variations inhérentes aux  
appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit  
einem hochohmigen Spannungsmesser gemessen. Dabei  
schwanken die Meßwerte aufgrund von Unter-  
schieden zwischen einzelnen Instrumenten oder  
Geräten u.U. geringfügig.

**CAUTION:** For continued safety, replace safety critical com-  
ponents only with manufacturer's recommended parts (refer  
to parts list).  Indicates safety critical components. To  
reduce the risk of electric shock, leakage-current or resistance

measurements shall be carried out (exposed parts are accepta-  
bly insulated from the supply circuit) before the appliance is  
returned to the customer.

KRC-653D/L (E)

Q

R

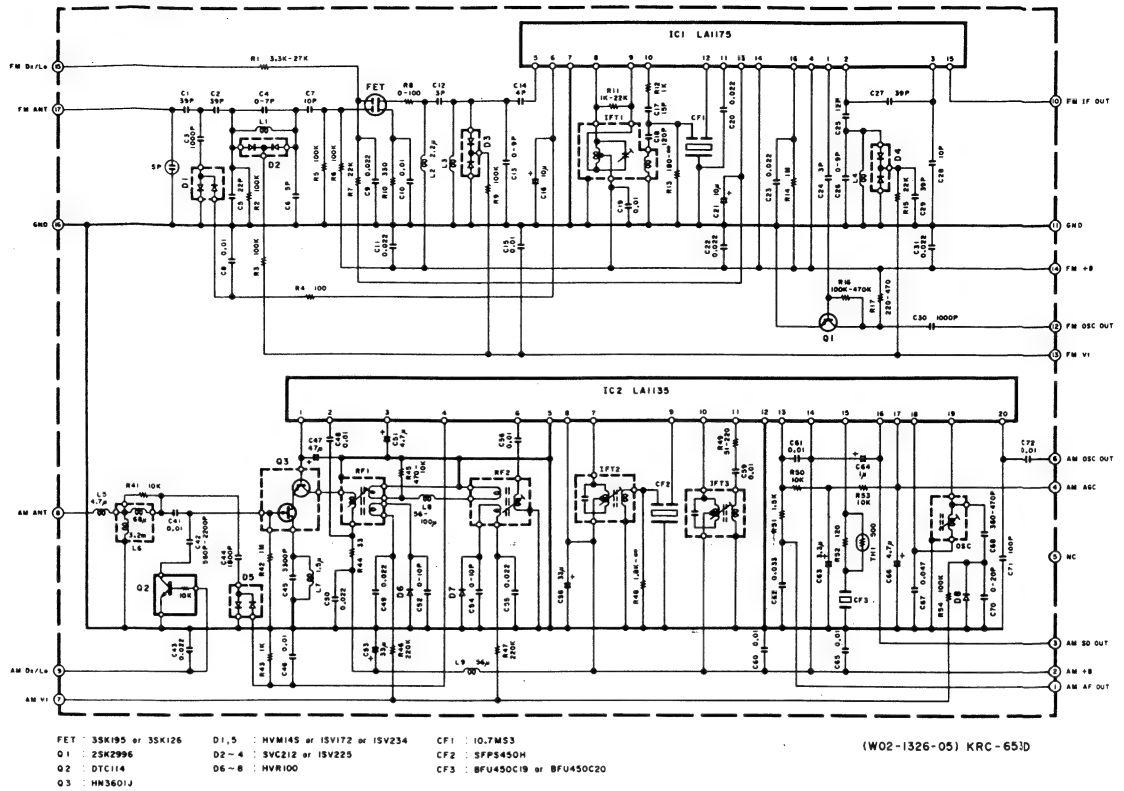
S

T

U

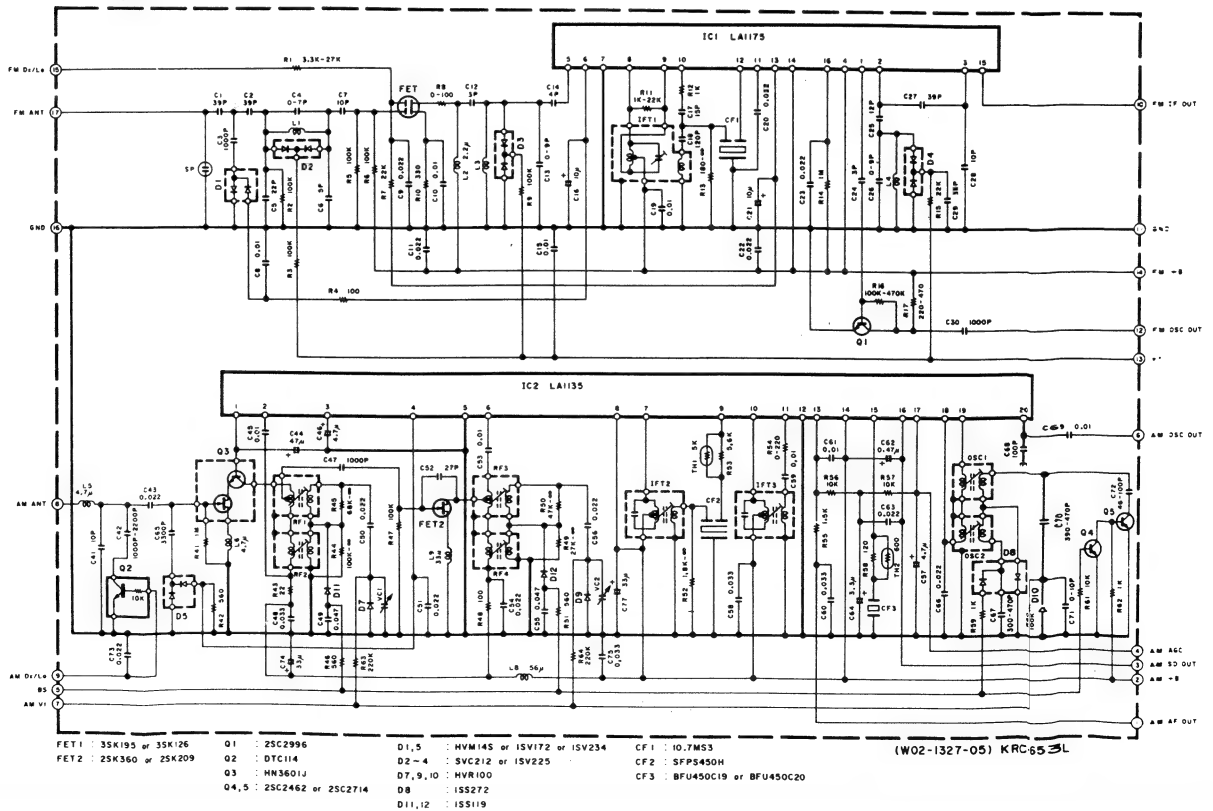
## KRC-653D

TU1: (W02-1326-05)



## KRC-653L

TU1: (W02-1327-05)



KRC-653D

KENWOOD

Y36-1502-70

Q

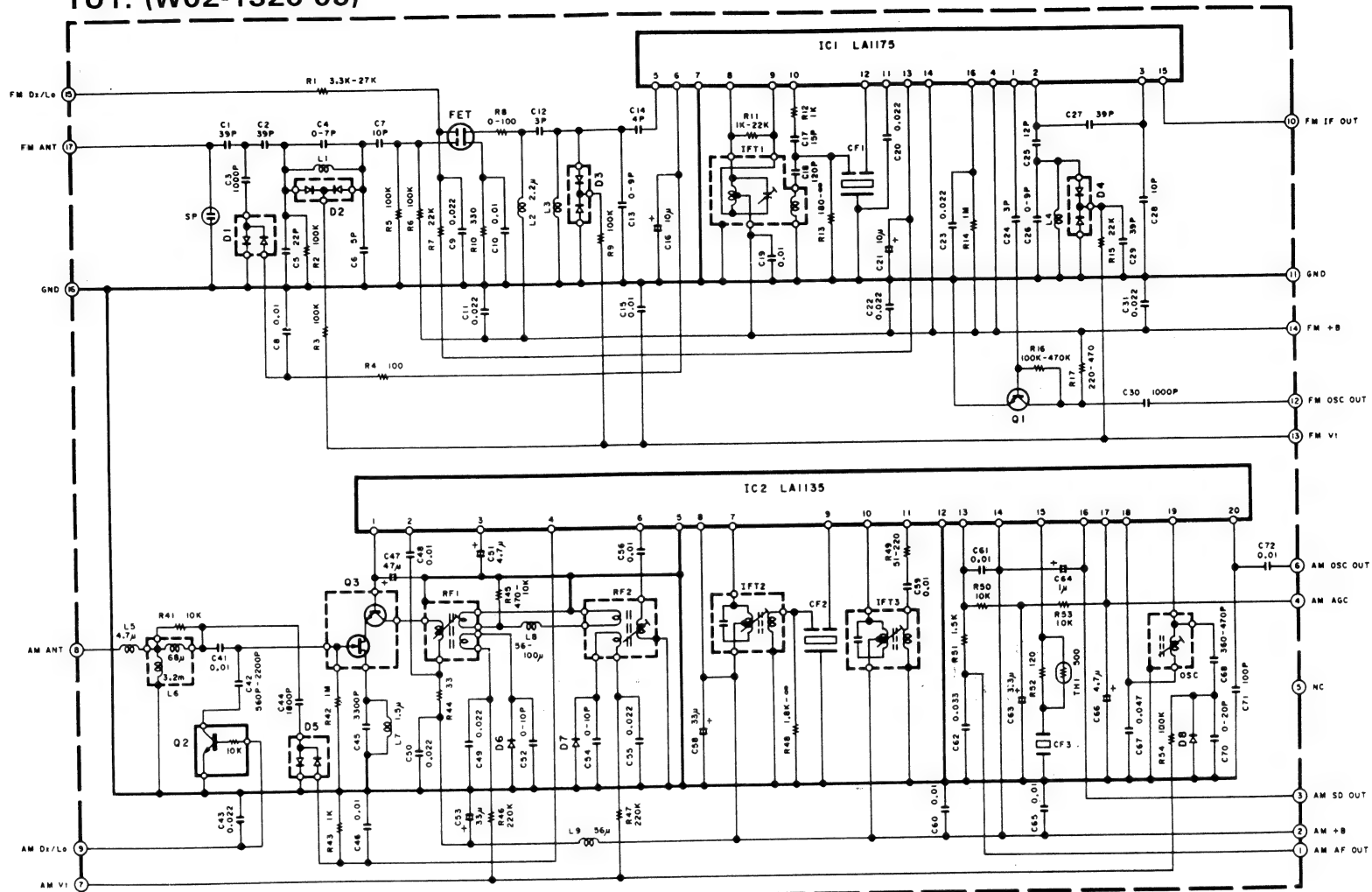
R

S

T

U

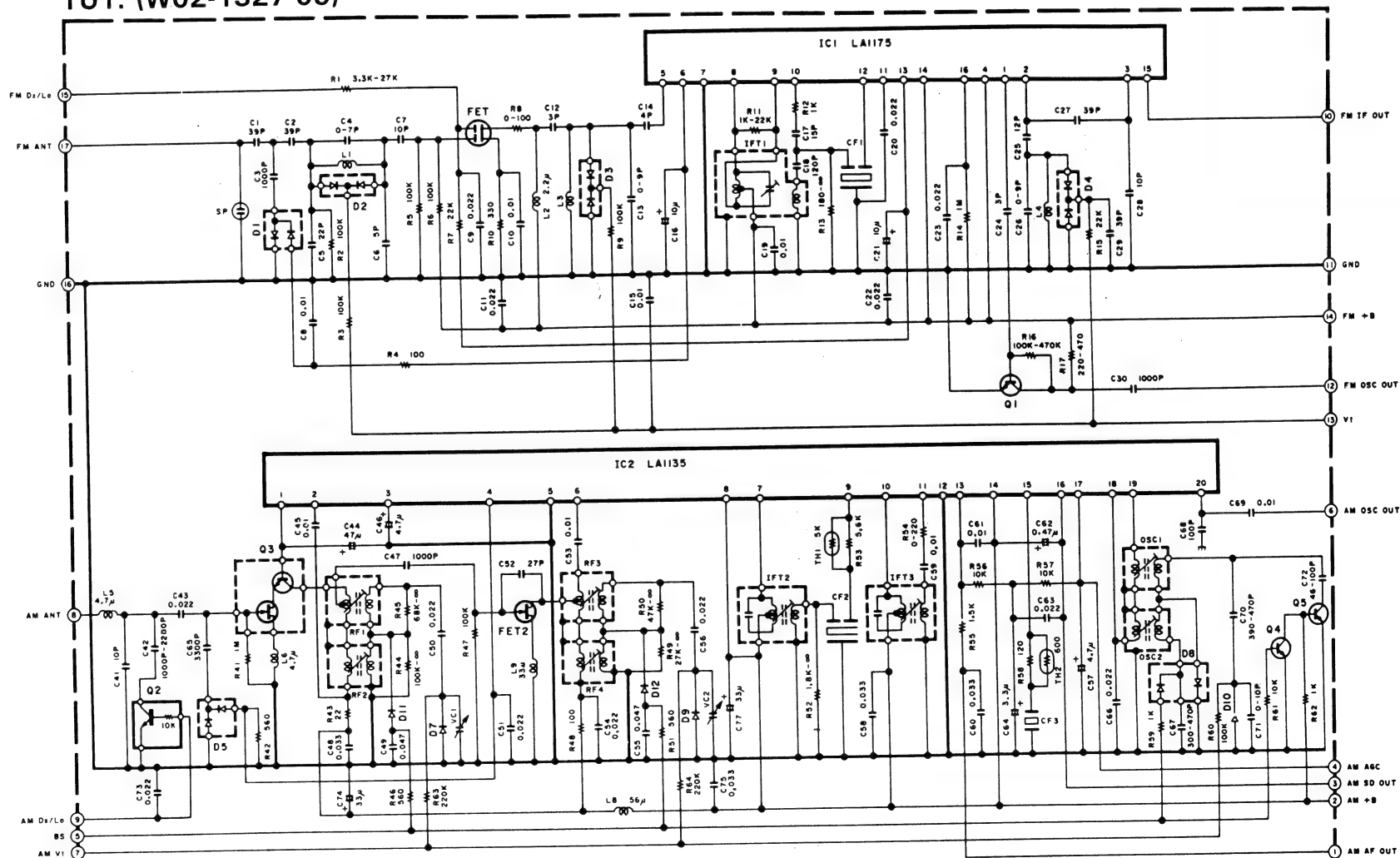
# KRC-653D TU1: (W02-1326-05)



FET : 3SK195 or 3SK126  
Q1 : 2SK2996  
Q2 : DTC114  
Q3 : HN3601J  
D1,5 : HVM145 or ISV172 or ISV234  
D2-4 : SVC212 or ISV225  
D6-8 : HVR100  
CF1 : 10.7MS3  
CF2 : SFP5450H  
CF3 : BFU450C19 or BFU450C20

(W02-1326-05) KRC-653D

# KRC-653L TU1: (W02-1327-05)



FET1 : 3SK195 or 3SK126  
FET2 : 2SK360 or 2SK209  
Q1 : 2SK2996  
Q2 : DTC114  
Q3 : HN3601J  
Q4,5 : 2SC2462 or 2SC2714  
D1,5 : HVM145 or ISV172 or ISV234  
D2-4 : SVC212 or ISV225  
D7,9,10 : HVR100  
D8 : ISS272  
D11,12 : ISS119  
CF1 : 10.7MS3  
CF2 : SFP5450H  
CF3 : BFU450C19 or BFU450C20

(W02-1327-05) KRC-653L

D/L (E)

exposed parts are accepta-

it) before the appliance is

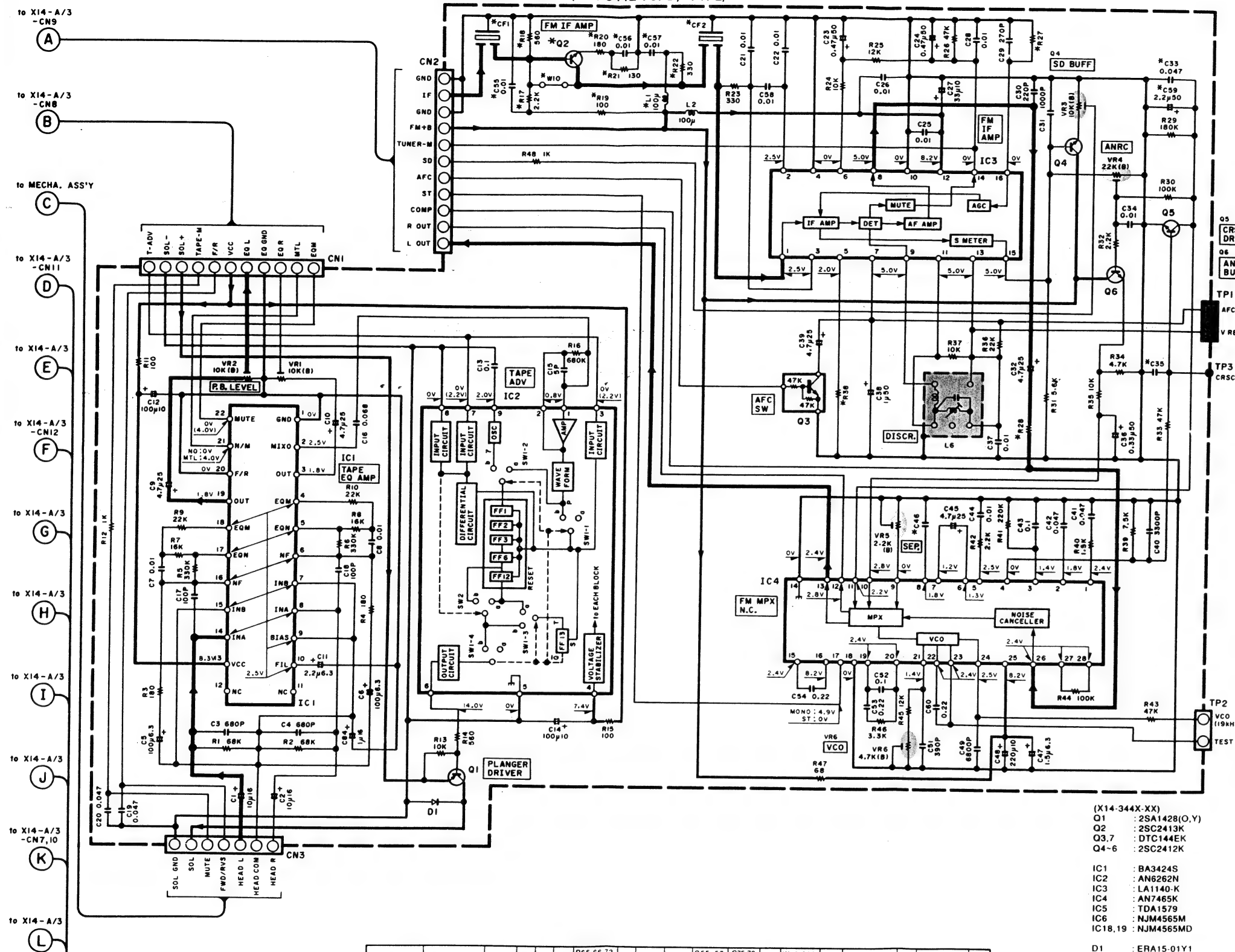
KRC-653D/L

Y36-1502-70

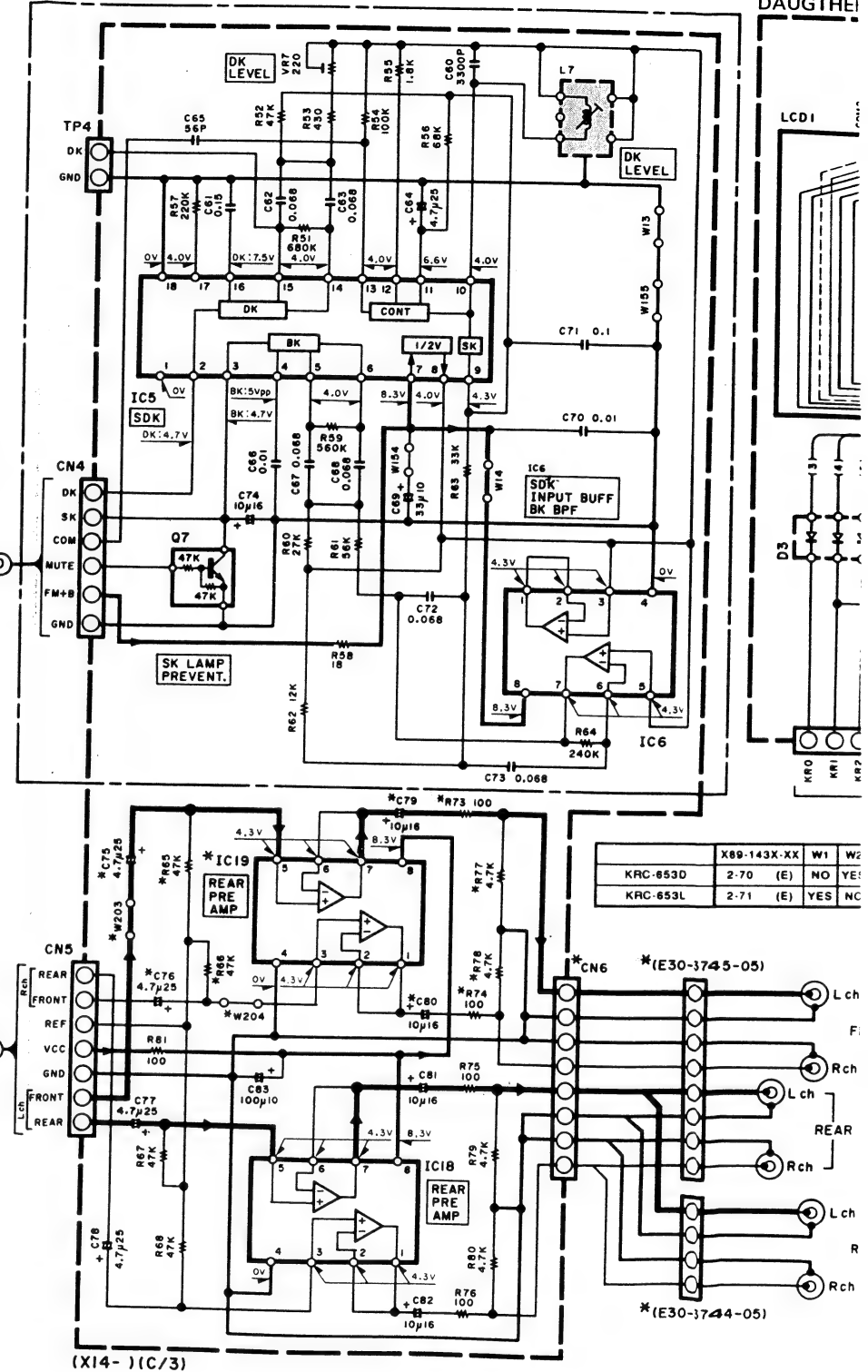
KENWOOD



## SYNTHESIZER UNIT (X14-3442-70: D, -71: L)

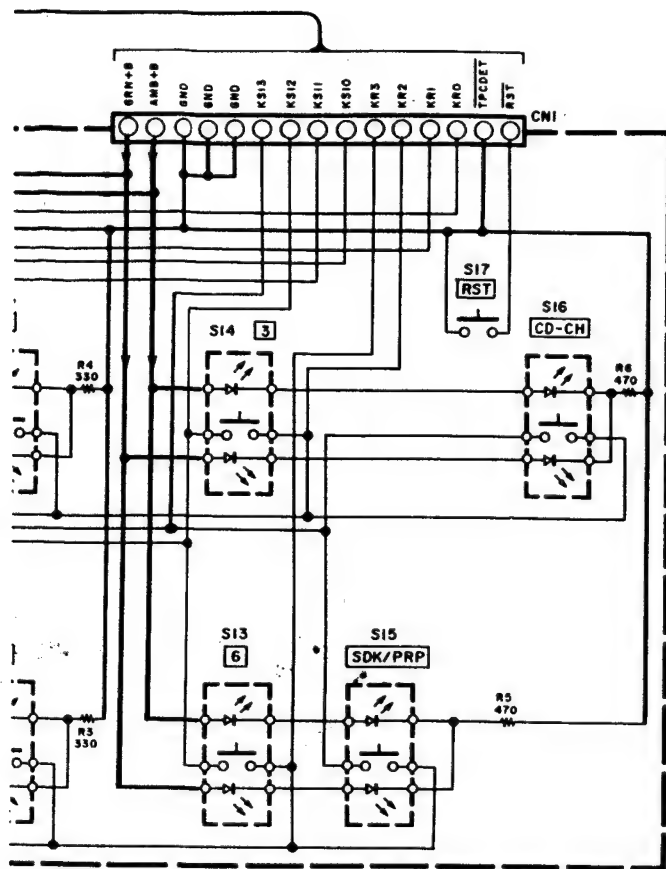


\*A (D TYPE ONLY)

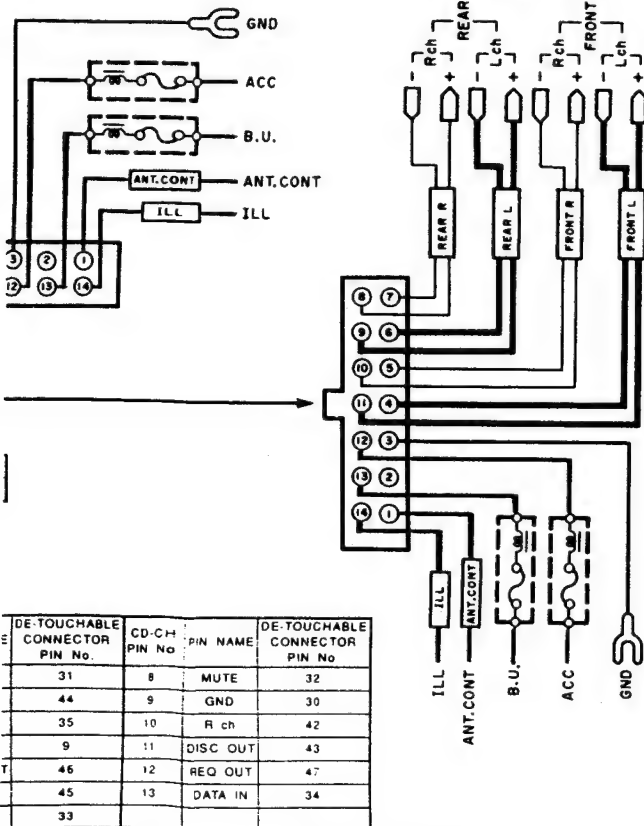


\_\_\_\_\_ SIGNAL LINE  
 \_\_\_\_\_ GND LINE  
 \_\_\_\_\_ +B LINE





\*(E30-3742-05)



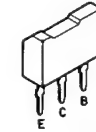
KRC-653D/L(E)

— SIGNAL LINE  
— GND LINE  
— +B LINE

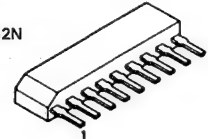
DTB143EK  
DTC124EK  
DTC144EK  
2SC2412K  
2SC2413K



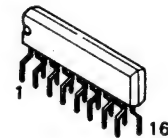
2SA1428



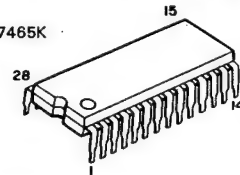
AN6262N



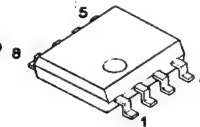
LA1140



AN7465K




NJM4565M  
NJM4565MD



DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig.

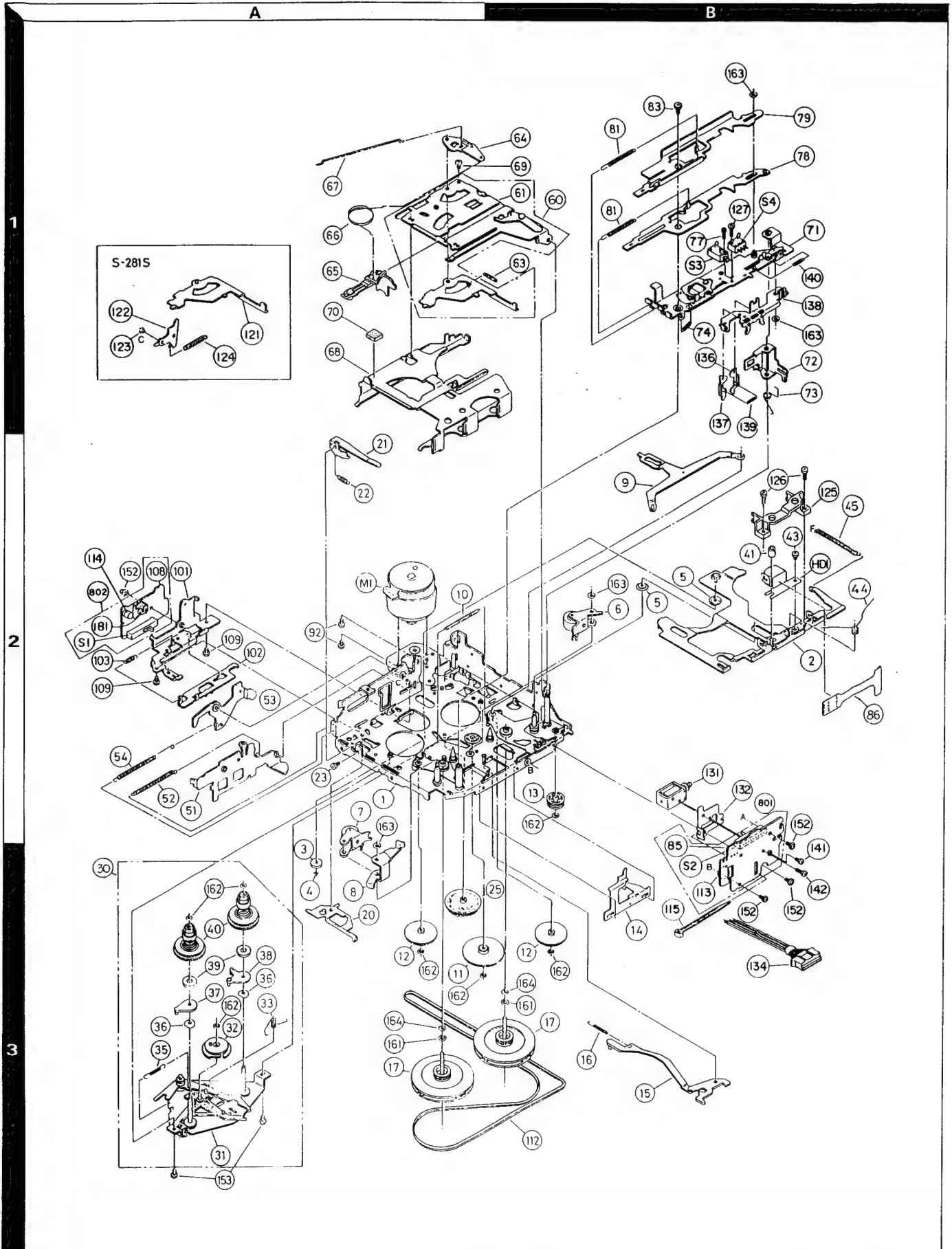
**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  Indicates safety critical components. To reduce the risk of electric shock, leakage current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

KRC-653D/L

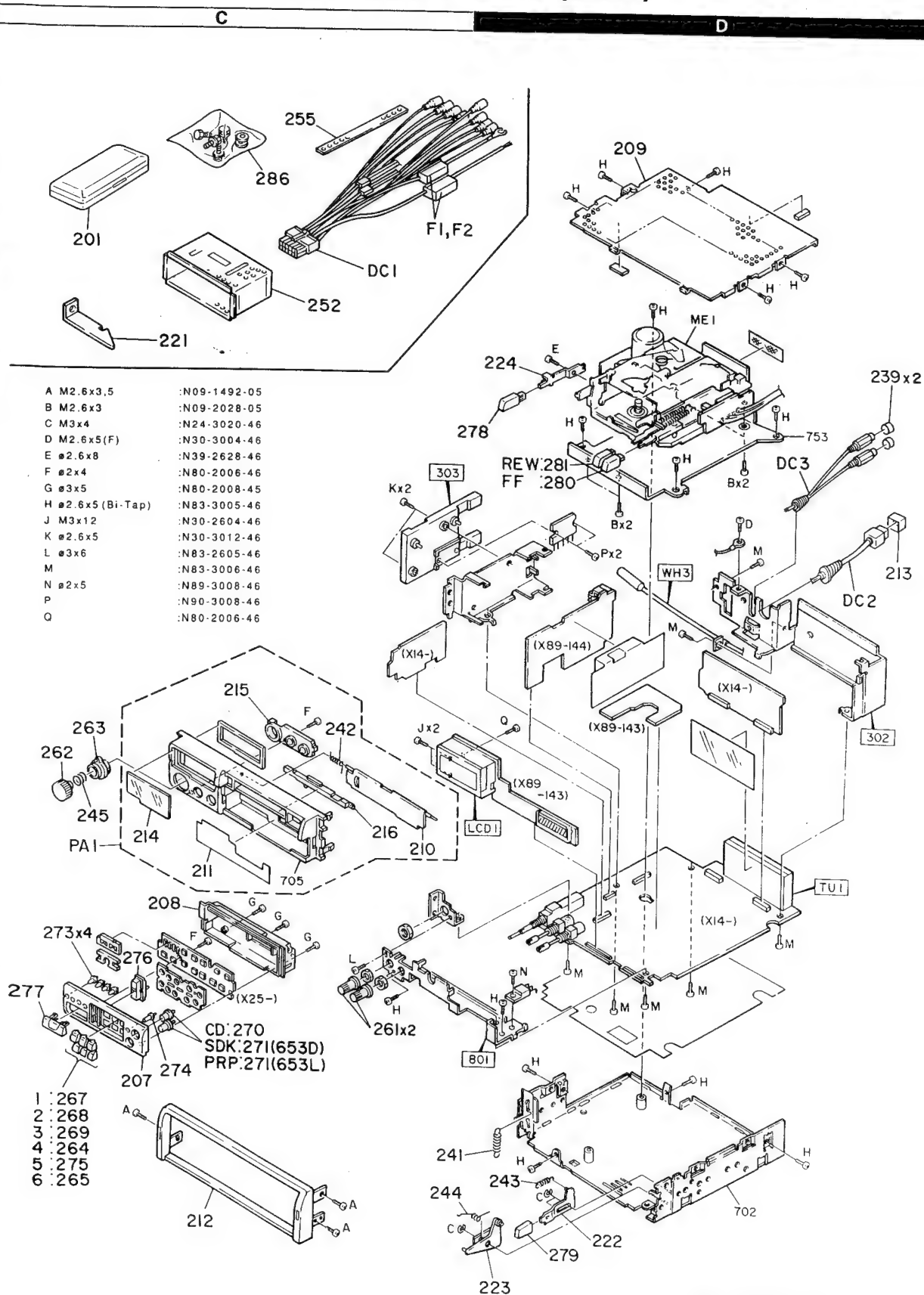
Y36-1502-70

KENWOOD

## EXPLODED VIEW (MECHANISM)



### EXPLODED VIEW (UNIT)



KRC-653D/L(E)

## PARTS LIST

× New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
KRC653D/L						
201	1C	*	A02-1415-02	PLASTIC CABINET	D L	
207	3C	*	A29-0704-01	PANEL (KRC-653D)		
207	3C	*	A29-0705-01	PANEL (KRC-653L)		
208	2C	*	A46-1205-01	REAR COVER		
209	1D	*	A52-0642-02	TOP COVER		
210	2C	*	A53-1540-03	CASSETTE LID	D L	
PA1	2C	*	A20-7765-03	PANEL ASSY		
211	2C	*	B03-3003-04	DRESSING PLATE		
212	3C	*	B07-2029-02	ESCUTCHEON		
213	2D	*	B09-0062-05	CAP		
214	2C	*	B10-1461-03	FRONT GLASS	D L D L L	
215	2C	*	B19-0895-03	LIGHTING BOARD		
216	2C	*	B19-0901-03	LIGHTING BOARD		
-			B46-0100-20	WARRANTY CARD		
-		*	B46-0182-04	ID CARD (KRC-653D)		
-		*	B46-0606-04	ID CARD (KRC-653L)	L L L L L	
-		*	B64-0154-00	INSTRUCTION (FRA. GER.)		
-		*	B64-0155-00	INSTRUCTION (ENG. FRA.)		
-		*	B64-0156-00	INSTRUCTION (DUT. ITA. SPA.)		
221	1C	*	D10-2740-04	LEVER	D L D L L	
222	3D	*	D10-2742-04	LEVER		
223	3D	*	D10-2743-04	LEVER		
224	1D	*	D10-2744-04	LEVER (EJECT)		
ME1	1D	*	D40-1032-15	CASSETTE MECHANISM ASSY		
Δ DC1	1C	*	E30-3741-05	DC CORD (critical comp.)	D L D L L	
DC2	2D	*	E30-3743-05	CORD WITH CONNECTOR		
DC3	1D	*	E30-3744-05	CORD WITH PLUG		
239	1D		F29-0049-05	INSULATING COVER		
F1	1C		F05-7521-05	FUSE (7.5A) ACC		
F2	1C		F06-3026-05	FUSE (3A) B.U.	D L D L L	
241	3D		G01-2040-04	EXTENSION SPRING		
242	2C		G01-2371-04	TORSION COIL SPRING		
243	3D	*	G01-2606-04	EXTENSION SPRING		
244	3D	*	G01-2607-04	TORSION COIL SPRING		
245	2C	*	G01-2612-04	COMPRESSION SPRING	D L D L L	
-		*	H01-9346-04	ITEM CARTON CASE (KRC-653D)		
-		*	H01-9347-04	ITEM CARTON CASE (KRC-653L)		
-		*	H03-3407-04	OUTER CARTON CASE (KRC-653D)		
-		*	H03-3408-04	OUTER CARTON CASE (KRC-653L)		
-		*	H10-4402-02	POLYST. FOAMED FIXTURE (BOTTOM)	D L D L L	
-		*	H10-4408-02	POLYST. FOAMED FIXTURE (UP)		
-			H25-0329-04	PROTECTION BAG (280X450X0.03)		
-			H25-0334-04	PROTECTION BAG (125X250X0.03)		
-			H25-0336-04	PROTECTION BAG (170X250X0.03)		
252	1C	*	J21-7088-51	MOUNTING HARDWARE	D L D L L	
255	1C		J54-0059-04	STAY		
261	3C		K23-1011-04	KNOB (BASS, TREBLE)		
262	2C		K23-1012-03	KNOB (VOL)		
263	2C		K23-1013-13	KNOB (FAD)		
264	3C	*	K24-0998-03	KNOB (4)	D L D L L	
265	3C	*	K24-1000-03	KNOB (6)		

E: Scandinavia &amp; Europe K: USA P: Canada W: Europe

Y: PX(Far East, Hawaii) T: England M: Other Areas

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D: KRC-653D

L: KRC-653L

Δ indicates safety critical components.

# KRC-653D/L

## PARTS LIST

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Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
267	3C	*	K24-1001-03	KNOB (1)	D	
268	3C	*	K24-1002-03	KNOB (2)	L	
269	3C	*	K24-1003-03	KNOB (3)		
270	3C	*	K24-1017-03	KNOB (CD)		
271	3C	*	K24-1018-03	KNOB (SDK) KRC-653D		
271	3C	*	K24-i019-03	KNOB (PRP) KRC-653L		
273	3C	*	K24-1020-04	KNOB (ILLUM ,AUTO ,AME ,CLK)		
274	3C	*	K24-1021-04	KNOB (RESET)		
275	3C	*	K24-1059-03	KNOB (S)		
276	3C	*	K25-0608-03	KNOB (FM/AM)		
277	3C	*	K25-0609-03	KNOB (TUNE)		
278	1D	*	K27-3525-04	KNOB (EJECT)		
279	3D	*	K27-3526-04	KNOB (LEVER for Detach. Panel)		
280	1D	*	K27-3527-04	KNOB (FF)		
281	1D	*	K27-3528-04	KNOB (REW)		
286	1C	*	N99-1570-05	SCREW SET		
A	3C		N09-1492-05	MACHINE SCREW (2.6X3.5,ナメ)		
B	1D, 2D		N09-2028-05	MACHINE SCREW (M3X4)		
C	3D		N24-3020-46	E TYPE RETAINING RING(2マール)		
D	2D		N30-3004-46	PAN HEAD MACHIN SCREW		
E	1D		N39-2628-46	PAN HEAD MACHIN SCREW		
F	2C, 3C		N80-2006-46	PAN HEAD TAPTITE SCREW		
G	2C, 3C		N80-2008-45	PAN HEAD TAPTITE SCREW		
H	1D, 3D		N83-3005-46	PAN HEAD TAPTITE SCREW		
<b>SYNTHESIZER UNIT (X14-3442-70; D, -71: L)</b>						
302	2D	*	A23-5049-03	REAR PANEL		
C1 ,2			CE04NW1C100M	ELECTRO      10UF      16WV		
C3 ,4			CK73FB1H681K	CHIP C        680PF      K		
C5 ,6			CE04NW0J101M	ELECTRO      100UF     6.3WV		
C7 ,8			CK73FB1H103K	CHIP C        0.010UF   K		
C9 ,10			CE04NW1E4R7M	ELECTRO      4.7UF      25WV		
C11			C92-0005-05	ELECTRO      2.2UF      6.3WV		
C12			CE04NW1A101M	ELECTRO      100UF     10WV		
C13			CK73EB1E104K	CHIP C        0.10UF     K		
C14			CE04NW1A101M	ELECTRO      100UF     10WV		
C15			CC73FCH1H050C	CHIP C        5PF          C		
C16			CK73EB1E683K	CHIP C        0.068UF   K		
C17 ,18			CC73FCH1H101J	CHIP C        100PF      J		
C19 ,20			CK73FB1E473KTA	CHIP C        0.047UF   K		
C21 ,22			CK73FB1H103K	CHIP C        0.010UF   K		
C23 ,24			CE04NW1HR47M	ELECTRO      0.47UF     50WV		
C25 ,26			CK73FB1H103K	CHIP C        0.010UF   K		
C27			CE04NW1A330M	ELECTRO      33UF       10WV		
C28			CK73FB1H103K	CHIP C        0.010UF   K		
C29			CK73FB1H271K	CHIP C        270PF      K		
C30			CC73FCH1H221J	CHIP C        220PF      J		
C31			CK73FB1H102K	CHIP C        1000PF     K		
C32			CE04NW1E4R7M	ELECTRO      4.7UF      25WV		
C34			CK73FB1H103K	CHIP C        0.010UF   K		
C35			CK73FB1H332K	CHIP C        3300PF     K		
C36			CE04NW1HR33M	ELECTRO      0.33UF     50WV		
C37			CK73FB1H103K	CHIP C        0.010UF   K		
C38			CE04NW1H010M	ELECTOR      1.0UF       50WV		
C39			CE04NW1E4R7M	ELECTRO      4.7UF      25WV		

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L: KRC-653L

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Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕 向	Re- marks 備考
C40			CK73FB1H332K	CHIP C 3300PF K		
C41 ,42			CK73FB1E473KTA	CHIP C 0.047UF K		
C43			CK73EB1E104K	CHIP C 0.10UF K		
C44			CK73FB1H103K	CHIP C 0.010UF K		
C45			CE04NW1E4R7M	ELECTRØ 4.7UF 25WV		
C46			CK73FB1H562K	CHIP C 5600PF K		
C47			C92-0501-05	CHIP-TAN 1.5UF 6.3WV		
C48			CE04DW1A221M	ELECTRØ 220UF 10WV		
C49			CK73FB1H682K	CHIP C 6800PF K		
C50			C93-0025-05	CERAMIC 0.22UF K		
C51			CQ92P2A391J	MYLAR 390PF J		
C52			CK73EB1E104K	CHIP C 0.10UF K		
C53 ,54			C93-0025-05	CERAMIC 0.22UF K		
C55 -58			CK73FB1H103K	CHIP C 0.010UF K		
C59			CE04NW1H2R2M	ELECTRØ 2.2UF 50WV		
C60			CQ93AP2A332J	POLYPRØ 3300PF J	E	
C61			CK73DB1H154K	CHIP C 0.15UF K	E	
C62 ,63			C91-2050-05	CERAMIC 0.068UF Z	E	
C64			CE04DW1E4R7M	ELECTRØ 4.7UF 25WV	E	
C65			CC73FCH1H560J	CHIP C 56PF J	E	
C66			CK73FB1H103K	CHIP C 0.010UF K	E	
C67 ,68			CK73EB1E683K	CHIP C 0.068UF K	E	
C69			CE04DW1A330M	ELECTRØ 33UF 10WV	E	
C70			CK73FB1H103K	CHIP C 0.010UF K	E	
C71			CK73EB1E104K	CHIP C 0.10UF K	E	
C72 ,73			CK73EB1E683K	CHIP C 0.068UF K	E	
C74			CE04DW1C100M	ELECTRØ 10UF 16WV	E	
C77 ,78			CE04DW1E4R7M	ELECTRØ 4.7UF 25WV		
C81 ,82			CE04DW1C100M	ELECTRØ 10UF 16WV		
C83			CE04DW1A101M	ELECTRØ 100UF 10WV		
C84			C92-0004-05	ELECTRØ 1.0UF 16WV		
C91			CE04DW1H2R2M	ELECTRØ 2.2UF 50WV		
C92 ,93			CK73FB1H102K	CHIP C 1000PF K		
C94 ,95			CK73FB1H153K	CHIP C 0.015UF K		
C97 -100			C90-2608-05	ELECTRØ 1.0UF 50WV		
C101			CE04CW1A220M	ELECTRØ 22UF 10WV		
C102			CE04CW1A101M	ELECTRØ 100UF 10WV		
C103			CK73FB1H103K	CHIP C 0.010UF K		
C104 ,105			CK73EB1E104K	CHIP C 0.10UF K		
C106			CK73EB1E683K	CHIP C 0.068UF K		
C107			CK73FB1H103K	CHIP C 0.010UF K		
C108			CE04DW1A330M	ELECTRØ 33UF 10WV		
C109			CK73EB1E104K	CHIP C 0.10UF K		
C111			CK73EB1H473K	CHIP C 0.047UF K		
C112			CE04CW1A101M	ELECTRØ 100UF 10WV		
C113			CK73FB1H103K	CHIP C 0.010UF K		
C114			CK73FB1H103K	CHIP C 0.010UF K		
C115-119		*	C90-2595-05	ELECTRØ 4.7UF 16WV		
C120			CK73FB1H103K	CHIP C 0.010UF K		
C121			CE04CW1A101M	ELECTRØ 100UF 10WV		
C122			C90-2525-05	NP-ELECT 2.2UF 35WV		
C123 ,124			CK73FB1H103K	CHIP C 0.010UF K		
C125 ,126			CE04CW1A101M	ELECTRØ 100UF 10WV		
C127			CK73FB1H103K	CHIP C 0.010UF K		
C128 ,129			CC73FCH1H220J	CHIP C 22PF J		

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D: KRC-65 3D

L: KRC-65 3L

⚠ indicates safety critical components.

# KRC-653D/L

## PARTS LIST

\* New Parts

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Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕 向	Re- marks 備考
C130		*	C90-2600-05	ELECTRØ 2.2UF 35WV	D	
C131			CK73FB1H103K	CHIP C 0.010UF K		
C132			CK73FB1E473KTA	CHIP C 0.047UF K		
C133			CK73FB1H103K	CHIP C 0.010UF K		
C134		*	C90-2600-05	ELECTRØ 2.2UF 35WV		
C135		*	C90-2600-05	ELECTRØ 2.2UF 35WV		
C136			C93-0025-05	CERAMIC 0.22UF K		
C137,138			CK73FB1H182K	CHIP C 1800PF K		
C139,140			CK73FB1H223KTA	CHIP C 0.022UF K		
C141,142			CK73FB1H182K	CHIP C 1800PF K		
C143,144			CC73FCH1H050C	CHIP C 5PF C	D	
C145,146			CE04NW1E4R7M	ELECTRØ 4.7UF 25WV		
C147,148		*	C90-2595-05	ELECTRØ 4.7UF 16WV		
C149			CE04CW1A101M	ELECTRØ 100UF 10WV		
C150			C92-0005-05	ELECTRØ 2.2UF 6.3WV		
C151			CK73FB1H103K	CHIP C 0.010UF K		
C152			CE04CW1A101M	ELECTRØ 100UF 10WV		
C153,154		*	C90-2595-05	ELECTRØ 4.7UF 16WV		
C155			CE04CW1A220M	ELECTRØ 22UF 10WV		
C156			CE04DW1C222M	ELECTRØ 2200UF 16WV		
C157			C90-2657-05	ELECTRØ 2200UF 16WV	D	
C158,159			CK73FB1H103K	CHIP C 0.010UF K		
C160-163			CK73EB1E104K	CHIP C 0.10UF K		
C164			CK73FB1H103K	CHIP C 0.010UF K		
C165			C90-2563-05	ELECTRØ 220UF 10WV		
C166			CK73FB1H332K	CHIP C 3300PF K		
C167,168			CK73FB1H182K	CHIP C 1800PF K		
C169,170			C90-2544-05	ELECTRØ 33UF 10WV		
C171,172		*	C90-2598-05	ELECTRØ 3.3UF 25WV		
C173,174			CE04NW1HR47M	ELECTRØ 0.47UF 50WV		
C177,178			CK73FB1H271K	CHIP C 270PF K	D	
C179			CK73FB1H103K	CHIP C 0.010UF K		
C180			CE04CW1A101M	ELECTRØ 100UF 10WV		
C181,182		*	C90-2592-05	ELECTRØ 10UF 6.3WV		
C183			CE04CW1A101M	ELECTRØ 100UF 10WV		
C184			CE04NW1C100M	ELECTRØ 10UF 16WV		
C185,186		*	C90-2592-05	ELECTRØ 10UF 6.3WV		
C191,192		*	C90-2595-05	ELECTRØ 4.7UF 16WV		
C193,194			CE04NW1E4R7M	ELECTRØ 4.7UF 25WV		
WH3	2D	*	E30-3783-05	CØRD WITH PLUG	D	
303	1C	*	F01-1392-03	HEAT SINK		
LH1 -3			J19-2826-05	HØLDER		
CF1 ,2			L72-0716-05	CERAMIC FILTER		
L1 ,2			L40-1011-17	SMALL FIXED INDUCTØR		
L3 ,4			L40-4791-17	SMALL FIXED INDUCTØR(4.7UH,K)		
L5			L40-1011-17	SMALL FIXED INDUCTØR		
L6			L30-0462-15	FM IFT		
L7			L39-0156-05	TRAP CØIL		
X1			L77-1163-05	CRYSTAL RESØNATOR		
J	2D		N30-2604-46	PAN HEAD MACHIN SCREW	D	
K	2C		N30-3012-46	PAN HEAD MACHIN SCREW		
L	3C		N83-2605-46	PAN HEAD TAPTITE SCREW		

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## PARTS LIST

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Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
M N P	2D, 3D 3D 2D		N83-3006-46 N89-3008-46 N90-3008-46	PAN HEAD TAPTITE SCREW BINDING HEAD TAPTITE SCREW TP HEAD MACHINE SCREW		
R1 ,2 R3 ,4 R5 ,6 R7 ,8 R9 ,10			RK73FB2A683J RK73FB2A181J RK73FB2A334J RK73FB2A163J RK73FB2A223J	CHIP R 68K J 1/10W CHIP R 180 J 1/10W CHIP R 330K J 1/10W CHIP R 16K J 1/10W CHIP R 22K J 1/10W		
R11 R12 R13 R14 R15			RK73FB2A101J RK73FB2A102J RK73FB2A103J R92-2018-05 RK73FB2A101J	CHIP R 100 J 1/10W CHIP R 1.0K J 1/10W CHIP R 10K J 1/10W CHIP R 560 J 1/2W CHIP R 100 J 1/10W		
R16 R17 R18 R19 R20			RK73FB2A684J RK73FB2A222J RK73FB2A561J RK73FB2A101J RK73FB2A181J	CHIP R 680K J 1/10W CHIP R 2.2K J 1/10W CHIP R 560 J 1/10W CHIP R 100 J 1/10W CHIP R 180 J 1/10W		
R21 R22 ,23 R24 R25 R26			RK73FB2A131J RK73FB2A331J RK73FB2A103J RK73FB2A123J RK73FB2A473J	CHIP R 130 J 1/10W CHIP R 330 J 1/10W CHIP R 10K J 1/10W CHIP R 12K J 1/10W CHIP R 47K J 1/10W		
R27 R28 R29 R30 R31			RK73FB2A563J RK73FB2A100J RK73FB2A184J RK73FB2A104J RK73FB2A562J	CHIP R 56K J 1/10W CHIP R 10 J 1/10W CHIP R 180K J 1/10W CHIP R 100K J 1/10W CHIP R 5.6K J 1/10W		
R32 R33 R34 R35 R36			RK73FB2A222J RK73FB2A473J RK73FB2A472J RK73FB2A103J RK73FB2A223J	CHIP R 2.2K J 1/10W CHIP R 47K J 1/10W CHIP R 4.7K J 1/10W CHIP R 10K J 1/10W CHIP R 22K J 1/10W		
R37 R38 R39 R40 R41			RK73FB2A103J RK73FB2A153J RK73FB2A752J RK73FB2A152J RK73FB2A224J	CHIP R 10K J 1/10W CHIP R 15K J 1/10W CHIP R 7.5K J 1/10W CHIP R 1.5K J 1/10W CHIP R 220K J 1/10W		
R42 R43 R44 R45 R46			RK73FB2A222J RK73FB2A473J RK73FB2A104J RK73FB2A123J RK73FB2A332J	CHIP R 2.2K J 1/10W CHIP R 47K J 1/10W CHIP R 100K J 1/10W CHIP R 12K J 1/10W CHIP R 3.3K J 1/10W		
R47 R48 R51 R52 R53			RK73FB2A680J RK73FB2A102J RK73FB2A684J RK73FB2A473J RK73FB2A431J	CHIP R 68 J 1/10W CHIP R 1.0K J 1/10W CHIP R 680K J 1/10W CHIP R 47K J 1/10W CHIP R 430 J 1/10W	D D D D D	
R54 R55 R56 R57 R58			RK73FB2A104J RK73FB2A182J RK73FB2A683J RK73FB2A224J RK73FB2A180J	CHIP R 100K J 1/10W CHIP R 1.8K J 1/10W CHIP R 68K J 1/10W CHIP R 220K J 1/10W CHIP R 18 J 1/10W	D D D D D	
R59			RK73FB2A564J	CHIP R 560K J 1/10W	D	

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# KRC-653D/L

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R60			RK73FB2A273J	CHIP R 27K J 1/10W	D	
R61			RK73EB2B563J	CHIP R 56K J 1/8W	D	
R62			RK73FB2A123J	CHIP R 12K J 1/10W	D	
R63			RK73FB2A333J	CHIP R 33K J 1/10W	D	
R64			RK73FB2A244J	CHIP R 240K J 1/10W	D	
R67, 68			RK73FB2A473J	CHIP R 47K J 1/10W		
R75, 76			RK73FB2A101J	CHIP R 100 J 1/10W		
R79, 80			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R81			RK73FB2A101J	CHIP R 100 J 1/10W		
R92			RK73FB2A223J	CHIP R 22K J 1/10W		
R93			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R94			RK73FB2A223J	CHIP R 22K J 1/10W		
R95			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R97			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R98			RK73FB2A333J	CHIP R 33K J 1/10W		
R99			RK73EB2B102J	CHIP R 1.0K J 1/8W		
R100			RK73FB2A180J	CHIP R 18 J 1/10W		
R101			RK73FB2A243J	CHIP R 24K J 1/10W		
R102-106			RK73FB2A473J	CHIP R 47K J 1/10W		
R107			RK73FB2A103J	CHIP R 10K J 1/10W		
R108			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R109			RK73FB2A332J	CHIP R 3.3K J 1/10W		
R110, 111			RK73FB2A822J	CHIP R 8.2K J 1/10W		
R112			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R114			RK73FB2A180J	CHIP R 18 J 1/10W		
R115, 116			RK73FB2A162J	CHIP R 1.6K J 1/10W		
R117, 118			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R120, 121			RK73FB2A273J	CHIP R 27K J 1/10W		
R122, 123			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R124			RK73FB2A183J	CHIP R 18K J 1/10W		
R125			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R126			RK73FB2A332J	CHIP R 3.3K J 1/10W		
R127			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R128			RK73FB2A101J	CHIP R 100 J 1/10W		
R129			RK73FB2A152J	CHIP R 1.5K J 1/10W		
R130			RK73EB2B471J	CHIP R 470 J 1/8W		
R131			RK73FB2A272J	CHIP R 2.7K J 1/10W		
R132, 133			RK73FB2A104J	CHIP R 100K J 1/10W		
R134			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R135, 136			RK73FB2A223J	CHIP R 22K J 1/10W		
R137			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R138			RK73FB2A473J	CHIP R 47K J 1/10W		
R139			RK73FB2A101J	CHIP R 100 J 1/10W		
R140			RK73FB2A473J	CHIP R 47K J 1/10W		
R141-143			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R144			RK73FB2A101J	CHIP R 100 J 1/10W		
R145			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R146			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R147			RK73EB2B102J	CHIP R 1.0K J 1/8W		
R148			RK73FB2A101J	CHIP R 100 J 1/10W		
R149-151			RK73FB2A103J	CHIP R 10K J 1/10W		
R152, 153			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R154			RK73FB2A103J	CHIP R 10K J 1/10W		
R155, 156			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R157		*	R92-2104-05	CHIP R 2.2 J 1W		

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## PARTS LIST

× New Parts

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Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
R158			RK73FB2A101J	CHIP R 100 J 1/10W		
R159			RK73FB2A223J	CHIP R 22K J 1/10W		
R160			RK73FB2A103J	CHIP R 10K J 1/10W		
R161			RK73FB2A223J	CHIP R 22K J 1/10W		
R162			RK73FB2A393J	CHIP R 39K J 1/10W		
R164			RK73FB2A223J	CHIP R 22K J 1/10W		
R165			RK73EB2B472J	CHIP R 4.7K J 1/8W		
R166			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R167-170			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R171, 172			RK73EB2B102J	CHIP R 1.0K J 1/8W		
R173			RK73EB2B223J	CHIP R 22K J 1/8W		
R174			RK73EB2B102J	CHIP R 1.0K J 1/8W		
R174			RK73EB2B223J	CHIP R 22K J 1/8W		
R175			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R176			RK73EB2B472J	CHIP R 4.7K J 1/8W		
R178			RK73EB2A103J	CHIP R 10K J 1/10W		
R179			RK73FB2A222J	CHIP R 2.2K J 1/10W		
R180			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R181-185			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R186			RK73EB2B102J	CHIP R 1.0K J 1/8W		
R187			RK73EB2B102J	CHIP R 1.0K J 1/8W		
R188, 189			RK73FB2A824J	CHIP R 820K J 1/10W		
R190-193			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R194			RK73FB2A473J	CHIP R 47K J 1/10W		
R195			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R196, 197			RK73FB2A473J	CHIP R 47K J 1/10W		
R198			RK73FB2A473J	CHIP R 47K J 1/10W		
R199, 200			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R203			RK73FB2A334J	CHIP R 330K J 1/10W		
R204			RK73FB2A103J	CHIP R 10K J 1/10W		
R205			RK73FB2A105J	CHIP R 1.0M J 1/10W		
R207			RK73FB2A103J	CHIP R 10K J 1/10W		
R208			RD14DB2H102J	SMALL-RD 1.0K J 1/2W		
R209			RK73FB2A223J	CHIP R 22K J 1/10W		
R210			RK73FB2A223J	CHIP R 22K J 1/10W		
R211			RK73FB2A223J	CHIP R 22K J 1/10W		
R212			RK73FB2A180J	CHIP R 18 J 1/10W		
R213			RK73EB2B332J	CHIP R 3.3K J 1/8W		
R214			RK73FB2A332J	CHIP R 3.3K J 1/10W		
R215			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R219			RK73EB2B103J	CHIP R 10K J 1/8W		
R220, 221			RK73FB2A272J	CHIP R 2.7K J 1/10W		
R222			RK73FB2A180J	CHIP R 18 J 1/10W		
R223			RK73FB2A103J	CHIP R 10K J 1/10W		
R224			RK73FB2A473J	CHIP R 47K J 1/10W		
R225, 226			RK73FB2A222J	CHIP R 2.2K J 1/10W		
R227, 228			RK73FB2A183J	CHIP R 18K J 1/10W		
R229, 230			RK73FB2A101J	CHIP R 100 J 1/10W		
R231, 232			RK73FB2A183J	CHIP R 18K J 1/10W		
R233			RK73EB2B472J	CHIP R 4.7K J 1/8W		
R234			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R235			RK73EB2B100J	CHIP R 10 J 1/8W		
R236			RK73FB2A100J	CHIP R 10 J 1/10W		
R237			RK73EB2B472J	CHIP R 4.7K J 1/8W		
R238			RK73FB2A472J	CHIP R 4.7K J 1/10W		

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## PARTS LIST

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Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
R239			RK73FB2A180J	CHIP R 18 J 1/10W		
R241, 242			RK73FB2A822J	CHIP R 8.2K J 1/10W		
R243, 244			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R245, 246			RK73FB2A473J	CHIP R 47K J 1/10W		
R248			RK73FB2A272J	CHIP R 2.7K J 1/10W	D	
R249, 250			RK73FB2A472J	CHIP R 4.7K J 1/10W	D	
R251, 252			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R253, 254			RK73FB2A222J	CHIP R 2.2K J 1/10W		
R255, 256			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R257, 258			RK73FB2A222J	CHIP R 2.2K J 1/10W		
R259, 260			RK73FB2A221J	CHIP R 220 J 1/10W		
R261, 262			RK73EB2B161J	CHIP R 160 J 1/8W		
R263, 264			RK73EB2B753J	CHIP R 75K J 1/8W		
R265			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R266-269			RK73EB2B2R2J	CHIP R 2.2 J 1/8W		
R272, 273			RK73EB2B272J	CHIP R 2.7K J 1/8W		
R274, 275			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R277			RK73FB2A180J	CHIP R 18 J 1/10W		
R278			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R279			RK73FB2A103J	CHIP R 10K J 1/10W		
R280			RK73FB2A223J	CHIP R 22K J 1/10W		
R281			RK73FB2A103J	CHIP R 10K J 1/10W		
R282			RK73FB2A223J	CHIP R 22K J 1/10W		
VR1 -3			R12-3100-05	TRIMMING POT.(10K ㊦)		
VR4			R12-3101-05	TRIMMING POT.(22K ㊦)		
VR5			R12-1071-05	TRIMMING POT.(2.2K ㊦)		
VR6			R12-1073-05	TRIMMING POT.(4.7K ㊦)		
VR7			R12-0096-05	TRIMMING POT.(220 ㊦)		
VR8			R12-3100-05	TRIMMING POT.(10K ㊦)	D	
VR9		*	R24-0604-05	POTENTIOMETER(80X2,20KX2)		
VR10, 11		*	R10-4644-05	POTENTIOMETER		
W1 -9			R92-2053-05	CHIP R 0 J 1/8W		
W11 -15			R92-2053-05	CHIP R 0 J 1/8W	O	
W11 ,12			R92-2053-05	CHIP R 0 J 1/8W	L	
W15 -69			R92-2053-05	CHIP R 0 J 1/8W	L	
W19 -50			R92-2053-05	CHIP R 0 J 1/8W	D	
W52 -88			R92-2053-05	CHIP R 0 J 1/8W	D	
W71 -73			R92-2053-05	CHIP R 0 J 1/8W	L	
W75 -88			R92-2053-05	CHIP R 0 J 1/8W	L	
W102-120			R92-2052-05	CHIP R 0 J 1/10W	L	
W102-123			R92-2052-05	CHIP R 0 J 1/10W	D	
W122-127			R92-2052-05	CHIP R 0 J 1/10W	L	
W125-127			R92-2052-05	CHIP R 0 J 1/10W	D	
D1			ERA15-01Y1	DIODE		
D6 ,7			MA110	DIODE		
D6 ,7			1SS355	DIODE		
D8			DAP202K	DIODE		
D9			MA110	DIODE		
D9			1SS355	DIODE		
D10			DAN202K	DIODE		
D11			1SS355	DIODE		
D12			MA8110-L	ZENER DIODE		
D14			MA8068-M	ZENER DIODE		
D15			1SS133	DIODE		

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## PARTS LIST

\* New Parts

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Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
D16			DAN202K	DIODE		
D17			MA8068-M	ZENER DIODE		
D18 -22			MA110	DIODE		
D18 -22			1SS355	DIODE		
D23 -26			1SS133	DIODE		
D28 ,29			MA110	DIODE	D	
D28 ,29			1SS355	DIODE	D	
D31			MA110	DIODE		
D31			1SS355	DIODE		
D32			ERA15-01	DIODE		
D33			DAN202K	DIODE		
D34			MA8062-M	ZENER DIODE		
IC1		*	BA3424S	IC		
IC2			AN6262N	IC(T.ADV)		
IC3			LA1140	IC(FM IF/DETECTION)		
IC4			AN7465K	IC		
IC5			TDA1579	IC(DECODER)	D	
IC6			NJM4565M	IC	D	
IC7			HA12134AF	IC(DOLBY B NR SYSTEM)		
IC8			TC74HC04AF	IC(INVERTER)		
IC9		*	1723GF-605-3BE	IC	D	
IC9		*	1723GF-606-3BE	IC	L	
IC10			BA3906-V1	IC		
IC11			TC4081BF	IC(AND X4)		
IC12			NJM4565MD	IC(OP AMP X2)		
IC13			TC4066BF	IC(BILATERAL SWITCH X4)		
IC14		*	BA3121F	IC		
IC15			TA8215H	IC(AF POWER AMP)		
IC16-18			NJM4565MD	IC(OP AMP X2)		
Q1			2SA1428(O,Y)	TRANSISTOR		
Q2			2SC2413K	TRANSISTOR		
Q3			DTC144EK	DIGITAL TRANSISTOR		
Q4 -6			2SC2412K	TRANSISTOR		
Q7			DTC144EK	DIGITAL TRANSISTOR	D	
Q15			DTC144EK	DIGITAL TRANSISTOR		
Q16			2SC2412K	TRANSISTOR		
Q17 ,18			DTA144EK	DIGITAL TRANSISTOR		
Q19			DTC144EK	DIGITAL TRANSISTOR	L	
Q20			DTA144EK	DIGITAL TRANSISTOR	L	
Q21 -23			2SC2412K	TRANSISTOR		
Q24 ,25			DTC144EK	DIGITAL TRANSISTOR		
Q26			DTA144EK	DIGITAL TRANSISTOR		
Q27			DTC144EK	DIGITAL TRANSISTOR		
Q28			DTC124EK	DIGITAL TRANSISTOR		
Q29			DTC144EK	DIGITAL TRANSISTOR		
Q30			DTA144EK	DIGITAL TRANSISTOR		
Q31 ,32			2SC2412K	TRANSISTOR		
Q33			DTA144EK	DIGITAL TRANSISTOR		
Q34 -36			2SC2412K	TRANSISTOR		
Q37			2SA1037K	TRANSISTOR		
Q38			2SC2412K	TRANSISTOR		
Q39 ,40			DTC144EK	DIGITAL TRANSISTOR		
Q41			2SB1370F8	TRANSISTOR		
Q42			2SC2412K	TRANSISTOR		
Q43			2SA1037K	TRANSISTOR	D	

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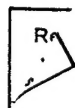
L: KRC-653L

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× New Parts  
Parts with  
Les articles  
Teile ohne

## PARTS LIST

Applied.  
Parts No. ne sont pas fournis.  
Liefer.



		arts No. 番 号	Description 部 品 名 / 規 格	Desti- nation 仕 向	Re- marks 備考
Q55 Q58 ,59 Q60		2SC2412K	TRANSISTOR	D	
		2SC2412K	TRANSISTOR		
		2SC2412K	DIGITAL TRANSISTOR		
		2SC2412K	DIGITAL TRANSISTOR		
		2SC2412K	TRANSISTOR		
		2SC2412K	TRANSISTOR		
		2SC2412K	DIGITAL TRANSISTOR		
		2SC2412K	DIGITAL TRANSISTOR		
		2SC2412K	DIGITAL TRANSISTOR		
		2SC2412K	DIGITAL TRANSISTOR		
Q65 Q66 ,67 Q68 ,69 Q70 ,71 Q72 ,73		2SC2412K	TRANSISTOR	D	
		2SC2412K	TRANSISTOR		
		2SC2412K	DIGITAL TRANSISTOR		
		2SC2412K	DIGITAL TRANSISTOR		
		2SC2412K	TRANSISTOR		
		2SC2412K	TRANSISTOR		
		2SC2412K	DIGITAL TRANSISTOR		
		2SC2412K	DIGITAL TRANSISTOR		
		2SC2412K	DIGITAL TRANSISTOR		
		2SC2412K	DIGITAL TRANSISTOR		
TU1	2D	W02-1326-05	FM/AM FRONT-END	D	
TU1	2D	W02-1327-05	FM/AM FRONT-END	L	
SWITCH UNIT (X25-4772-70)					
D1 -4		B30-1349-05	LED		
J1		E59-0806-05	RECTANGULAR PLUG		
R1 ,2		RK73FB2B471J	CHIP R 470 J 1/8W		
R3 ,4		RK73FB2A331J	CHIP R 330 J 1/10W		
R5 ,6		RK73FB2B471J	CHIP R 470 J 1/8W		
S1 -4		S40-1096-05	PUSH SWITCH		
S5 ,6		S40-1607-05	PUSH SWITCH		
S7 -16		S40-1606-05	PUSH SWITCH		
S17		S40-1607-05	PUSH SWITCH		
DAUGHTER UNIT (X89-1432-70: D, -71: L)					
D5	2D	* B30-1365-05	LED		
LCD1		* B38-0552-05	LIQUID CRYSTAL		
PL1 ,2		B30-1346-05	LAMP (5.5V,125A AMB)		
PL3 ,4		B30-1353-05	LAMP (5.5V,125MA)		
PL5		B30-1332-05	LAMP (12V .06A,AMB)		
PL6		B30-1331-05	LAMP (12V .06A,GRN)		
C1 -3		C92-0005-05	ELECTRO 2.2UF 6.3WV		
J3		* E58-0815-05	RECTANGULAR RECEPTACLE		
Q	2D	N80-2006-46	PAN HEAD TAPTITE SCREW		
R1 -4		RK73FB2A102J	CHIP R 1.0K J 1/10W		
R5		RK73FB2A391J	CHIP R 390 J 1/10W		
R6		RK73FB2A103J	CHIP R 10K J 1/10W		
R7		RK73FB2A223J	CHIP R 22K J 1/10W		
R8		RK73FB2A103J	CHIP R 10K J 1/10W		
R9		RK73FB2A104J	CHIP R 100K J 1/10W		
R10		RK73FB2A102J	CHIP R 1.0K J 1/10W		
R11		RK73FB2A223J	CHIP R 22K J 1/10W		
R12		RK73FB2A103J	CHIP R 10K J 1/10W		
R13		RK73FB2A473J	CHIP R 47K J 1/10W		
R14		RK73FB2A223J	CHIP R 22K J 1/10W		
R15		RK73FB2A105J	CHIP R 1.0M J 1/10W		
R16		RK73FB2A332J	CHIP R 3.3K J 1/10W		

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Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
R17 W1 W2			RK73FB2A103J R92-2052-05 R92-2052-05	CHIP R 10K J 1/10W CHIP R 0 J 1/10W CHIP R 0 J 1/10W	D L	
S1			S40-1607-05	PUSH SWITCH		
D1 D2 D2 D3 D4			IMN10 MA110 1SS355 IMN10 MA110	DIODE DIODE DIODE DIODE DIODE		
D4 D6 -8 D6 -8 Q1 ,2 Q3 ,4			1SS355 MA110 1SS355 DTC124EK DTB143EK	DIODE DIODE DIODE DIGITAL TRANSISTOR DIGITAL TRANSISTOR		
Q5 -7 Q8 -10 Q11 ,12			DTC144EK 2SC2412K DTC144EK	DIGITAL TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR		
<b>DAUGHTER UNIT (X89-1442-70)</b>						
C1 C2 C3 C4 C5 ,6			CE04DW1H3R3M CK73EB1H273K CK73EB1E104K CK73EB1H223K CK73FB1H223KTA	ELECTRO 3.3UF 50WV CHIP C 0.027UF K CHIP C 0.10UF K CHIP C 0.022UF K CHIP C 0.022UF K		
J1			E58-0804-05	RECTANGULAR RECEPTACLE		
R1 ,2 R3 R4 R5 ,6 R7			RK73FB2A392J R92-0366-05 RK73FB2A563J RK73FB2A223J RK73FB2A472J	CHIP R 3.9K J 1/10W CHIP R 560 J 1W CHIP R 56K J 1/10W CHIP R 22K J 1/10W CHIP R 4.7K J 1/10W		
W13			R92-2053-05	CHIP R 0 J 1/8W		
D1 D2 D3 D4 D4			ERA15-01 RM10Z ERA15-01 MA110 1SS355	DIODE DIODE DIODE DIODE DIODE		
Q1 Q2 ,3 Q4			2SB1277 2SA1048 DTC114EK	TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR		
<b>CASSETTE MECHANISM ASS'Y (D40-1032-15)</b>						
1 2 3 4 5	2A 2B 3A 3A 2B		A10-2089-08 J21-7207-08 D14-0616-08 N24-3012-41 D14-0617-08	CHASSIS CALKED ASSY MOUNTING HARDWARE ROLLER A E TYPE RETAINING RING ROLLER B		
6 7 8 9 10	2B 2A 3A 2B 2A		D14-0618-08 D14-0619-08 D10-2666-08 D10-2667-08 G01-2560-08	PINCH ROLLER F PINCH ROLLER R LEVER (FR CAM) LEVER (PROGRAM) TENSION SPRING		
11 12 13	3A 3A, 3B 2B		D13-1079-08 D13-1081-08 D15-0908-08	GEAR (IDLE) GEAR (TAKE UP) PULLEY		

E: Scandinavia &amp; Europe K: USA P: Canada W: Europe

Y: PX(Far East, Hawaii) T: England M: Other Areas

Y: AAFES(Europe) X: Australia

D: KRC-653 D

L: KRC-653 L

⚠ indicates safety critical components.

# KRC-653D/L

## SPECIFICATIONS

Specification subject to change without notice.

### FM Tuner Section

Frequency Range .....	87.5 MHz ~ 108.0 MHz
Usable Sensitivity (DIN) .....	1.1 $\mu$ V/75 ohms
Stereo Sensitivity (S/N = 46 dB) .....	1.6 $\mu$ V/75 ohms
Frequency Response ( $\pm$ 4.5 dB) .....	30 Hz ~ 15 kHz
Signal to Noise Ratio (IEC-A) .....	68 dB
Selectivity (DIN) .....	70 dB
Stereo Separation (1 kHz) .....	35 dB
19 kHz Carrier Leakage .....	65 dB

### MW Tuner Section

Frequency Range .....	531 kHz ~ 1,611 kHz
Usable Sensitivity .....	30 $\mu$ V

### LW Tuner Section

Frequency Range .....	153 kHz ~ 281 kHz
Usable Sensitivity .....	60 $\mu$ V

### Cassette Deck Section

Tape Speed .....	4.76 cm/s
Wow & Flutter (WRMS) .....	0.12% (WRMS)
Fast Winding Time (C-60) .....	100 sec
Frequency Response	
(120 $\mu$ s) .....	30 Hz ~ 16 kHz (+4 dB, -6 dB)
(70 $\mu$ s) .....	30 Hz ~ 18 kHz (+4 dB, -6 dB)
Stereo Separation (1 kHz) .....	40 dB
Signal to Noise Ratio (Dolby B NR OFF) .....	54 dB
(Dolby B NR ON) .....	63 dB

### Audio Section

Maximum Output Power .....	25 W $\times$ 2 or 15 W $\times$ 4
Output Power (10% THD, 1 kHz, 4 ohms) .....	20 W $\times$ 2
(1% THD, 1 kHz, 4 ohms) .....	15 W $\times$ 2
Tone Action .....	Bass: 100 Hz $\pm$ 10 dB
	Treble: 10 kHz $\pm$ 10 dB
Preout Level/Impedance .....	800 mV (max.)/180 ohms

### General

Operating Voltage .....	14.4 V (11 ~ 16 V allowable)
Current Consumption .....	6 A at Rated Power
Dimensions (W $\times$ H $\times$ D) .....	188 $\times$ 58 $\times$ 177 mm
Installation Size (W $\times$ H $\times$ D) .....	182 $\times$ 52 $\times$ 155 mm
Weight .....	1.7 kg

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### Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the Europe (E) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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